

ENABLING LEGISLATION FOR PHYSICIAN ASSISTANTS IN PUERTO RICO:
A SOCIOCULTURAL POLICY ANALYSIS

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ABSTRACT

**JUSTINE STRAND: Enabling legislation for physician assistants in Puerto Rico:
a sociocultural policy analysis
(Under the direction of Thomas C. Ricketts, PhD)**

Puerto Rico is the last large jurisdiction in the United States without enabling legislation for physician assistants (PAs). This qualitative inquiry seeks to characterize the barriers to, and potential facilitators of implementation of physician assistants in the Commonwealth of Puerto Rico, and recommend strategies for implementation.

Twenty-five semi-structured interviews were conducted in Puerto Rico in January 2008, from a purposeful sample of practicing physicians, medical educators, members of the legislative and executive branches of government, health system executives, and physician assistants with knowledge of Puerto Rico.

Interviews were conducted in English and Spanish and digitally recorded and transcribed by the investigator. Analysis of the transcribed interviews identified themes which were coded and grouped for convergence and divergence of perspectives.

Antagonist themes asserted there is no shortage of physicians, that geographic and primary care access is good, that patients will not accept PAs, and PAs will experience a negative practice environment with respect to malpractice and reimbursement, as do physicians. Proponent themes argued there are transportation barriers to care, delays in access to specialist care, substandard primary care by generalist physicians, the majority of whom are international medical graduates, elite physician flight from the

island, and PA-like roles that have been created “below the radar,” demonstrating the need for PAs.

Cross-cutting themes include organized medicine and nursing opposition, overall loss of physicians from the island, increasing health care costs, lack of unanimity and policy action by organized medicine, and poor understanding of PAs.

Strategic recommendations include a public relations campaign targeted at physicians and legislators, and a dedicated lobbyist located in Puerto Rico. An initial pilot implementation is recommended in the medical and surgical subspecialties at the University of Puerto Rico Medical Center, with future primary care demonstration projects on the islands of Vieques and Culebra and in the rural community of Castañer. Pilot projects should include prospective evaluations, including cost, quality and patient satisfaction outcomes.

To Jasiel and Jackson

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really important in life. Jasiel has carried more than his share of the household tasks in support of my legislative, career and educational efforts over the years. He accompanied me every step of the way in Puerto Rico, serving as chauffeur for the wild ride of more than 1,000 miles as I raced from interview to interview. He gives me unconditional love and support, and can make me laugh in the most trying circumstances. Jasiel is not just the love of my life, he makes life fun. The joy of accomplishment is best shared, and this work would not have been possible without Jasiel's love and support.

PREFACE

In 2004, I visited Puerto Rico for the first time for a meeting of the Physician Assistant (PA) Education Association Board of Directors. As a director at large, one of my tasks was to assist in the development of the new International Affairs Committee. The PA profession was becoming a global phenomenon, with initiatives in many countries, from the Netherlands, United Kingdom and Canada to South Africa and Taiwan. I was struck by the fact that as we were creating mechanisms to assist other countries with the development of the PA concept, Puerto Rico was the last large jurisdiction in the US without enabling legislation for PAs. Curious, I engaged in conversations with Puerto Ricans about their experiences with the health care system when the opportunity arose. They spoke of having to arrive at a clinic in the early morning and waiting all day without a designated appointment, and told me that some people with financial resources went to Miami when they needed to see subspecialists because of issues with access to care. The structure of the health care delivery system in Puerto Rico seemed ripe for evaluation and analysis.

As a physician assistant conducting research about physician assistants, I bring more than two decades of experience in clinical practice, advocacy and policy analysis for the profession. While practicing in Texas in the 1980s, I served as president of the Texas Academy of Physician Assistants, and successfully lobbied the first physician assistant licensing and prescribing laws. Practicing in a community health center in Greeley, Colorado, and at the Durham County Health Department in North Carolina, I

have seen firsthand the problems people face with access to health care. Through my years of advocacy and clinical practice, and in my current position educating PAs at Duke University, I have come to believe strongly in the value PAs bring to the health care system, and I believe utilization of PAs could improve health care delivery in Puerto Rico.

The goal of the dissertation for the Leadership Doctorate in Public Health is to analyze a specific health policy problem and design a pragmatic solution, including a concrete implementation plan. In a sense, the dissertation is hoped to have a Hawthorne effect—changing the policy environment by virtue of the research having been performed.

My research consisted of 25 semi-structured interviews conducted on location in Puerto Rico during January 2008. While I was not a *participant observer* in the classic ethnographic sense, I cannot credibly claim to be without bias or interest. During my interviews, it was difficult at times to remain impassive as subjects expressed negative feelings about PAs or gave inaccurately limited descriptions of what PAs are legally authorized to do in the mainland US. I strove to maintain what Michael Quinn Patton calls *empathic neutrality*, “an empathic stance in interviewing [which] seeks vicarious understanding without judgment (neutrality) by showing openness, sensitivity, respect, awareness.”¹ I believe my years as a practicing clinician interacting with patients stood me in good stead during these interviews, as did my years of lobbying experience. To achieve policy change is to be willing to compromise, and to achieve agreement among often opposing groups one has to be skilled at Janusian thinking: the ability to see both sides of an issue.

“Why are you doing this research?” During the course of my interviews, this question was asked from varying perspectives. Some interviewees seemed puzzled by my pursuit of a narrow and quirky topic. Some were unalterably opposed to any utilization of physician assistants in Puerto Rico and suspected my motives. Others were enthusiastic about legally authorizing PAs in Puerto Rico and wondered how I had found them (my interview subjects were all identified through publicly available sources). All participants were gracious, regardless of their stance on physician assistants.

A note about language: interviews were conducted in the language chosen by each subject, either English or Spanish. The Spanish of Puerto Rico is different in some respects from the Spanish I utilize in my clinical practice, where my Spanish-speaking patients are mostly from Mexico and Central America. It took several days to tune my ears to the rhythm and phraseology of Puerto Rican Spanish. Interestingly, my concerns about possibly missing meaning because of language may have helped me to probe more deeply and not assume face-meaning for words. As an example, the term *generalista* appears to simply mean a physician in general practice. I was to learn that *generalistas* figure centrally in the Puerto Rico health care system, and their training, licensing and reimbursement present controversies that are central to the acceptance or rejection of physician assistants.

I was profoundly moved by the trust that interview subjects placed in me, and came away with the feeling that they expressed themselves to me as an outsider in ways they may not have felt comfortable doing within their own organizations. My agreement with interview subjects was to maintain anonymity to the greatest extent possible, but Puerto Rico is, as many interviewees commented, “a small island.” Because so many

subjects shared their views without reservation, and because of the politically charged environment, I have done my best to avoid identifying subjects' roles or disciplines, and my descriptions of my interview subjects may seem excessively vague to some readers as a result.

Finally, I developed an abiding respect for the commitment and perseverance of those who work tirelessly to deliver patient care in Puerto Rico with limited resources and bureaucratic obstacles, when so many others are choosing to leave the island. I believe they deserve partners to lighten the load they bear, and I believe PAs could offer substantial support for their efforts.

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LIST OF ABBREVIATIONS

AAPA	American Academy of Physician Assistants
AMA	American Medical Association
AMPR	Asociación Médica de Puerto Rico (Puerto Rico Medical Association)
ASES	Administración de Seguros de Salud de Puerto Rico (Puerto Rico Health Insurance Administration)
CDT	Centers for Diagnosis and Treatment
CMS	Center for Medicare and Medicaid Services
ELA	Estado Libre Asociado (Free Associated State)
GDP	Gross domestic product
GP	General practitioner
IPA	Independent practice association
IRB	Institutional Review Board
MCAT	Medical College Admission Test
MRI	Magnetic resonance imaging
MSA	Metropolitan statistical area
NCCPA	National Commission on Certification of Physician Assistants
NCQA	National Committee for Quality Assurance
NCSL	National Conference of State Legislatures
NP	Nurse practitioner
OECD	Organization for Economic Cooperation and Development
PA	Physician assistant
PA-C	Physician assistant, certified

PAHO	Pan American Health Organization
PALH	Physician Assistants for Latino Health
PIP	Partido Independentista Puertorriqueño (Puerto Rican Independence Party)
PNP	Partido Nuevo Progresista (New Progressive Party)
PPD	Partido Popular Democrático (Popular Democratic Party)
PPR	Partido Puertorriqueños por Puerto Rico (Puerto Rico for Puerto Ricans Party)
SCHIP	State Children's Health Insurance Program
TEM	Tribunal Examinador de Médicos (Puerto Rico Medical Board)
UNC	University of North Carolina
UPR	Universidad de Puerto Rico (University of Puerto Rico)
US	United States
USMLE	United States Medical Licensing Examination

INTRODUCTION

Over the four decades of its existence, the PA profession has achieved implementation of PAs in all states and territories except Puerto Rico. The purpose of this dissertation is to understand the barriers to enabling legislation in the Commonwealth, and propose strategies to facilitate acceptance and implementation.

Physician assistants were born amid a health care workforce crisis in the mid-1960s, when the passage of Medicare and Medicaid created challenges for access to health care. While millions of Americans who had previously lacked health insurance were now covered, coverage alone was not enough to assure they would receive needed services. Whether due to shortage or maldistribution, a lack of physicians spurred the development of new health care professionals, including physician assistants and nurse practitioners.

Through twenty-five semi-structured interviews with key informants familiar with health care politics and policy in Puerto Rico, divergent perceptions of the need for PAs emerged. Woven through the discourse is the concept of health care access, with antagonists arguing that access is good, citing the large number of physicians on a small island. Proponents saw a very different picture of access: where transportation challenges, a non-existent appointment system and a shortage of specialist physicians delayed or denied care to many Puerto Ricans.

Health care access is multi-dimensional, and includes availability, accessibility, accommodation, affordability, and acceptability. Availability considers whether there are

enough specialists to meet patients' need. Accessibility includes transportation, and whether providers accept insurance such as Medicaid, or in the case of Puerto Rico, *La Reforma*. Accommodation goes to the ability to schedule an appointment without disrupting one's life. Affordability is the ability to pay for services. Acceptability includes patients' satisfaction with their interactions with the clinician, and how quickly an appointment can be scheduled.² Health care access is not just about geography and numbers of physicians; it cannot be measured in doctors per square mile—and may not be fully achieved, even with adequate numbers of physicians for the population served.

Through the initial years of struggle to achieve enabling legislation in the mainland US, in state after state, PAs had physician champions but also encountered resistance from organized medicine. The discourse of resistance often followed the patterns described by Albert O. Hirschman in his insightful book, *The Rhetoric of Reaction*.³ Initially, antagonists argued that PAs were dangerous and unqualified to perform what amounted to the practice of medicine, delegated to them by their supervising physicians. This is the language of jeopardy. As resistance waned, antagonists argued futility, that tasks delegated to PAs would be undesirable, that their victory would be pyrrhic because of low salaries and a lack of patient acceptance. There are echoes of these arguments in the discourse of interviews conducted for this study.

The language about health care access, and the rhetoric offered in resistance to implementation of PAs in Puerto Rico reflect the negotiation for jurisdiction described by Andrew Abbot as he considered *The System of Professions*.⁴ This struggle applies not just to PAs and Puerto Rico, but to any new professional seeking acceptance by a dominant profession.

This dissertation seeks to understand why there is no enabling legislation for PAs in Puerto Rico, and to use that understanding to initiate an implementation plan. Chapter I reviews the history of the PA profession and their implementation across the US, the evolution of the roles they play in health care, and the evidence for the quality, cost-effectiveness and patient acceptance of the care they provide. Chapter II concerns the history of Puerto Rico. Chapter III considers the sociologic theories of the professions and their application to PAs. Chapter IV reviews the history of medicine and health care in Puerto Rico. Chapter V delineates the study methods, Chapter VI presents results, and Chapter VII contains discussion of the findings. Chapter VIII proposes an implementation plan for achieving enabling legislation for PAs in Puerto Rico.

CHAPTER I

PHYSICIAN ASSISTANTS: HISTORY, ROLE, EVIDENCE

Physician assistants (PAs) practice medicine with physician supervision in all 50 states, the District of Columbia, the Commonwealth of the Northern Mariana Islands, Guam and the United States Virgin Islands. Two insular areas, the territory of American Samoa and the Commonwealth of Puerto Rico, do not have enabling legislation for PAs.⁵ In existence for nearly 40 years, the PA profession has demonstrated its ability to provide high quality, cost-effective health care with high levels of patient satisfaction. Physician assistants have historically located in rural and medically underserved areas, thereby increasing access to health care, though demand in urban areas, academic medical centers and medical and surgical subspecialties has changed this distribution in recent years.

Physician assistants: history

The physician assistant profession was founded by Eugene A. Stead, Jr., MD, Chairman of the Department of Medicine at Duke University. Dr. Stead had become frustrated with physicians' inability to attend continuing education conferences, as they were unable to leave their practices. He believed that much of medical practice was relatively predictable, and could be taught to bright, motivated individuals in less time than it took to train physicians. He based this in part on the fast-track training of physicians during World War II, and in part on observation of a high school graduate trained to diagnose and treat illness by a rural North Carolina physician during the

1950s.⁶ In 1965, four former Navy corpsmen entered the first physician assistant program at Duke University.

Physician assistants are unique in that they were not created to fill a need resulting from new technology—but to perform the same tasks as physicians, with their supervision. In the early years of the PA profession, Stead and his colleagues made a conscious decision to rely on state “delegatory clauses” for the legal basis of PA practice, to ensure maximum role flexibility. This meant that the PA’s scope of practice was to be determined by each individual supervising physician. Eugene Schneller, a medical sociologist who was the first to study the PA role, called this “negotiated performance autonomy.”⁷ Through this arrangement, PA tasks are determined by the training and experience of the PA and the supervising physician, and task complexity usually increases over time. As a result, PAs may be found in every practice setting and all areas of medicine. In an outcome never imagined in the early years of the profession, PAs perform complex procedures such as colonoscopies and endoscopically harvesting saphenous veins as first assistants at cardiac bypass surgery. At Duke University Medical Center, PAs perform cardiac catheterizations with excellent outcomes.⁸

Physician assistants: education

There are 139 accredited PA programs in the US, graduating about 4,500 students per year.⁹ On average, PA programs are about two years long, and upon completion award a Master’s degree. The typical PA student has a bachelor’s degree and 45 months of health care experience upon enrollment in a PA program.⁵

PA education consists of an initial didactic year, with classroom and laboratory instruction in anatomy and physiology, pathophysiology, pharmacology, clinical

medicine, physical diagnosis, behavioral and social sciences, and health policy. The second year is devoted to clinical rotations, with required clinical experiences in family medicine, general internal medicine, pediatrics, prenatal care and gynecology, general surgery, emergency medicine, psychiatry/behavioral medicine and geriatrics. An important aspect of PA education is socialization in the dependent practitioner role, in other words, “knowing one’s limits.”

Upon graduation, PAs sit for the national certifying examination, administered by the National Commission on Certification of Physician Assistants (NCCPA), open only to graduates of accredited programs. To maintain certification, PAs must earn 100 hours of continuing medical education credits every two years, and recertify by examination every six years.¹⁰ All states require certification for licensure. Certified PAs may use the initials PA-C (physician assistant, certified) after their names.

State laws governing physician assistant practice

All states and most US territories have laws authorizing PA practice, and all 50 states, the District of Columbia, and Guam have enacted laws that authorize PAs to prescribe medications. Most states have enacted enabling legislation similar to the model law developed by the American Academy of Physician Assistants (AAPA), based on the principles that PAs practice medicine with physician supervision, with scope of practice determined by that physician. Physician assistants may practice at a distance, as most states do not require “over the shoulder” supervision. The AAPA model law states:¹¹

Supervision shall be continuous but shall not be construed as necessarily requiring the physical presence of the supervising physician at the time and place that the services are rendered.

It is the obligation of each team of physician(s) and physician assistant(s) to ensure that the physician assistant’s scope of practice is identified; that

delegation of medical tasks is appropriate to the physician assistant's level of competence; that the relationship of, and access to, the supervising physician is defined; and that a process for evaluation of the physician assistant's performance is established.

The majority of states allow PAs to prescribe, dispense and administer Schedule II through V ("controlled") substances. The AAPA model law defines scope of practice in this way:

The practice of a physician assistant shall include medical services within the education, training, and experience of the physician assistant that are delegated by the supervising physician.

Medical services rendered by physician assistants may include, but are not limited to

- 1) obtaining patient histories and performing physical examinations;
- 2) ordering and/or performing diagnostic and therapeutic procedures;
- 3) formulating a diagnosis;
- 4) developing and implementing a treatment plan;
- 5) monitoring the effectiveness of therapeutic interventions;
- 6) assisting at surgery;
- 7) offering counseling and education to meet patient needs; and
- 8) making appropriate referrals.

The activities listed above may be performed in any setting authorized by the supervising physician, including but not limited to: clinics, hospitals, ambulatory surgical centers, patient homes, nursing homes, and other institutional settings.

PA enabling legislation: history

Enactment of legislation to enable physician assistant practice has been a state by state phenomenon, undertaken by individual PAs, physician champions and state PA associations, with the ongoing support of a strong national professional association. The AAPA, through its office of Government and Professional Affairs and its division of State Practice Law and Government Issues, provides model legislative language, facilitates networking among PA advocates at the state level, and provides technical assistance and support to state PA associations. AAPA tracks legislative progress, but has

no mechanism for intentionally and prospectively assessing factors that lead to successful diffusion of the PA innovation at the state level. Although many factors impact the introduction and implementation of PAs at the state level, acceptance by physicians has historically been the key ingredient of success. Where individual physician champions and organized medicine are supportive, the practice environment for PAs is positive, and includes the key elements of prescriptive privileges and indirect supervision (North Carolina, Washington, and others). Where physicians have opposed PAs, restrictive state legislation has required “over the shoulder” supervision and historically prohibited prescribing by PAs (as in Indiana, the last state to authorize prescriptive authority for PAs) or authorized only limited prescribing.

The first PAs graduated from Duke in 1967, and began practice with no legal framework beyond “respondeat superior,” the ability of physicians to delegate tasks to nurses and others. Recognizing that greater legal structure would be needed, in 1969 the Department of Health, Education and Welfare contracted with Duke’s Department of Community Health Sciences, which housed the Physician Assistant Program, to develop model legislation for PA practice. A group of national experts convened at Duke in 1969, and after reviewing various options, arrived at consensus supporting general delegation of medical acts, tasks and functions to PAs, with authority for regulation in the state medical boards. Three more conferences were held annually through 1972.¹² The proposed model legislation was reviewed by a legislative study commission,¹³ and enacted by the North Carolina General Assembly in 1971.

The first states to enact enabling legislation for PAs were North Carolina, New York, California and Colorado. By 1972, 20 states had enacted laws authorizing PA

practice.¹⁴ An August 1973 news release from the US Department of Health, Education and Welfare noted 33 states had enacted enabling legislation: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Iowa, Kansas, Maine, Maryland, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, Oklahoma, Oregon, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia and Wyoming.¹⁵ These early PA practice acts were usually limited to recognizing the right of the physician to delegate tasks to qualified personnel, and in most cases did not extend to licensing of physician assistants nor did they offer title protection. From those early years, state PA practice laws have evolved to licensing acts, placing authority for PA regulation with the state medical board or other entity, requiring physician supervision, and establishing application, license renewal and disciplinary requirements. By 1992, all states except Mississippi had enacted enabling legislation for PAs. A PA licensing law was passed in Mississippi in 2000.¹⁶ In 2007, Indiana became the last state to authorize delegated prescriptive authority for physician assistants.

PA practice characteristics

The number of practicing PAs has grown from 29,000 in 1996 to more than 70,000 in 2008. Seventeen percent of PAs practice in non-metropolitan statistical areas (non-MSAs, defined as areas having fewer than 1,000 persons per square mile), and 39% are in primary care, with the majority of those in family medicine.⁵ Among all individuals who graduated from PA programs, 89% are in active clinical practice. The AAPA estimates that in 2007, 245 million visits were made to PAs.¹⁷ Physician assistants enjoy

high levels of vocational satisfaction,¹⁸ and the Bureau of Labor Statistics ranks PAs the fourth fastest growing occupation through 2014.¹⁹

Quality of Care

Many studies have shown that PAs provide high quality care at lower costs than physicians. In 1986, the Congressional Office of Technology Assessment reviewed studies regarding PAs, nurse practitioners and certified nurse midwives, and found that within their scopes of practice, they delivered quality care with high levels of patient satisfaction.²⁰ Hooker and Cawley reviewed the literature regarding PA quality of care, largely in managed care and outpatient settings through 2002²¹ and as PAs are increasingly used to fill gaps in care caused by residency training 80-hour work week rules, similar findings have extended to academic medical centers and subspecialties.

Quality of care, as measured by adherence to clinical guidelines and patient outcomes, was found to be equivalent or enhanced by the use of PAs and nurse practitioners in a neonatal intensive care unit.²² Quality was found to be improved by the use of physician assistants at a Level II Trauma Center by decreased transfer time to surgery or intensive care and length of stay, despite higher severity of injury scores.²³ PAs and nurse practitioners improved care of Hepatitis C patients at the Cleveland Clinic, as measured by decreased medication side effects and increased patient adherence to treatment regimens.²⁴ A retrospective analysis of care in a PA-dedicated trauma program at Toledo Hospital, Ohio, revealed decreased length of stay with no increase in mortality.²⁵ Primary care of HIV patients by PAs and nurse practitioners was found to be equal in quality to that of physician HIV experts, and higher than physician non-HIV experts. While these studies are of limited generalizability due to their limited scope and

design, there is a preponderance of evidence over more than 35 years for the quality of health care provided by PAs.

Cost-effectiveness

Substantial evidence shows that physician assistants are cost effective providers of health care. Jane Record found PA productivity to cost ratios positive in health maintenance organizations.^{26, 27} Other studies have found PA utilization to be cost-effective in managed care organizations,²⁸ and family or general medicine practices.^{29, 30}

Patient satisfaction

Studies measuring patient satisfaction with physician assistants have been consistently positive. The range of settings include rural primary care,³¹ large staff model HMOs,^{32, 33} and an emergency medicine fast-track.³⁴ A review of a large random sample of Medicare beneficiaries satisfaction with PAs and nurse practitioners revealed satisfaction equal to that found with physicians.³⁵ As stated in the Eighth Report to the President and Congress on the Status of Health Personnel, 1991: “Physician assistants have demonstrated their clinical effectiveness, both in terms of quality of care and patient acceptance.”³⁶

CHAPTER II

PUERTO RICO

The history of Puerto Rico, its status as a former colony of Spain and subsequently the United States, is important for understanding the social and political milieu of the island today. The roots of Puerto Rican culture and the tradition of health care access for all lead from the Spanish arrival in 1493, to the public health advances of the turn of the 20th century, to regionalization of the health care system in the 1950s, to today's uneasy rapprochement with managed care. Puerto Rico's history is one of great challenges and great achievements, woven in a vibrant tapestry of passionate political engagement.

Puerto Rico is part of the Greater Antilles island chain in the Northwestern Caribbean. The island is 100 miles long and 35 miles across: 3,500 square miles of land and 750 miles of rugged coastline and has a population of nearly four million. A steep mountain range, the Cordillera Central, bisects the island from east to west. Three smaller adjacent islands are part of Puerto Rico: Vieques, Culebra, and Mona. Strategically located as a gateway to Latin America, it is also in the path of many Atlantic hurricanes; the word hurricane is derived from *Jurakán*, the malevolent god of the indigenous population, the Taínos.

Christopher Columbus claimed the island for Spain in 1493. Originally called Boriquén by the Taínos, Christopher Columbus named his conquest San Juan Bautista de Puerto Rico. The island was not settled until Ponce de Leon arrived to search for gold in

1508. Surface deposits were mined through slave labor by the Taínos and quickly depleted. In the late 1500s African slaves were introduced and subsequent waves of agricultural economies included sugar cane, ginger, coffee and rice (slavery was abolished in 1873).³⁷ The main utility of Puerto Rico for Spain was its strategic location, conferring the advantage of control over most trade to South America.

In 1765, Spain dispatched Marshal Alejandro O'Reilly to evaluate the situation of Puerto Rico. O'Reilly went far beyond what the crown expected in his report, *Memoria*, taking a census of inhabitants, and quantifying and describing trade and the social milieu. The King's main concern was smuggling and contraband, but O'Reilly found these activities to be survival tactics of a people with few options for progress and development.³⁸

By the early 1800s, Puerto Rico was transitioning from a colonial economy to a national economy, coinciding with the decline of the Spanish Empire in the rest of Latin America and the world.³⁷ Simon Bolívar's liberation of the rest of South America by 1824 did not extend to Puerto Rico and Cuba, which remained under Spanish control.³⁹ Subsequently, three revolutionary movements against Spain occurred during the 19th century: *Gloriosa*, Lares and Yara. In 1868, the *Gloriosa* revolution in Spain itself caused Queen Isabella II to give up the throne peacefully. Just five days later, independence leader Ramón Emeterio Betances's followers occupied the town of Lares and declared Puerto Rico free. Their revolution was short-lived, as it was quickly squashed by the Spanish, but their battle cry, "*Puerto Rico libre!*" (Puerto Rico is free!) lives on in the spirit of *independentistas* on the island today. The third revolution, *El Grito de Yara*,

resulted in a ten-year war against Spain by Cuban independence leaders, which ended in 1878.³⁸

In 1898 the United States invaded Puerto Rico at Guánica in the southwestern part of the island, simultaneously capturing Cuba and the Philippines in just a few weeks. While the incident of the sinking of the *Maine* in Havana Bay was the ostensible reason for declaring war on Spain, what John Hay, the US Ambassador to England called a “splendid little war”⁴⁰ was also a focus of competition for readership between two newspapers in New York. Lurid stories of Spanish atrocities and photographs of war scenes boosted circulation, in an example of “yellow journalism.” The US maintained Cuba as a protectorate for 35 years, and held the Philippines until the 1940s.³⁹ Puerto Rico was termed a “dependency,” “possession,” or unincorporated territory and remained part of the United States.

Although more delicate terms may have been used at the time, Puerto Rico was a colony of the United States. The economic and social marginalization of Puerto Rico is well documented. Ronald Fernandez notes that President McKinley in 1899 “presided over ceremonies that openly humiliated the Puerto Ricans and completely disregarded the opinions of a culture whose core values included a deep concern for *dignidad* and *respeto* (consideration and respect).”

Through a series of appointments by US presidents, Puerto Rico was tightly governed by US governors and a mainland-based Executive Committee that determined the fate of the Puerto Ricans. Based on the widely held belief that Puerto Rico was too immature and child-like to govern itself, Puerto Ricans “would have only the rights that their tutors and Congress chose to give them. The Jeffersonian philosophy of government

by consent, based on inalienable rights, as set forth in the Declaration of Independence, was conveniently shelved.”³⁸

The Foraker Act, which established the first Puerto Rican constitution and assured US control by mandating the presidential appointment of governors and establishing a US-dominated executive council, was passed by Congress in 1900. Though it created a House of Delegates for Puerto Rico, similar to a lower house in a bicameral legislative body, the governor could veto any of its decisions. The US mandated everything from tariffs on sugar and shipping to the required spelling of the island’s name—Porto Rico, even though the word *porto* does not exist in Spanish. Fernandez quotes Leo Rowe: “‘This is the way we do it in the States’ was regarded as an argument sufficient to bring conviction to the mind of every native.” Fernandez sums up the sentiment, “what the United States touches she makes holy.”⁴¹ While the Foraker Act was touted as a temporary measure, Puerto Ricans were to endure a series of non-elected governors until 1947.

The independence movement simmered below the surface despite US political and economic control. Puerto Rican leaders advocated for change in the colonial tutelage system during the first two decades of the 20th century. José de Diego and Luis Muñoz Rivera led the dominant Union party, but there was discord as de Diego advocated for full independence while Muñoz Rivera sought to establish home rule.^{37, 38} Both of their efforts were unsuccessful.

In 1917, passage of the Jones Act conferred Puerto Ricans US citizenship, but not the right to vote. It established a bicameral, elected legislature, but the US retained control of the governorship and executive council, which included such important posts

as auditor, education commissioner (who decided what language would be used in schools) and attorney general. Economic policies which favored US business remained in place.³⁷ With citizenship came the obligation to serve in the military, and just a few weeks after the Jones Act was passed, the US declared war on Germany, and Puerto Rican men were subject to the draft. Four thousand men were sent to Panama to serve in the Army in 1917, where they were segregated into black and white units.³⁸

One of the worst examples of a US governor was appointed by President Warren Harding in 1921. Montgomery Reily boasted of not knowing where Puerto Rico was when he was named to the post, and as a mortgage broker he knew little about governing. Both Harding and Reily regarded the desire for independence as treason, and Reily wrote leader Antonio Barceló a letter warning him to “sever your connection with the independence party and become a loyal Porto Rican American, or we cannot have any friendly political relations.” Morales Carrión quotes historian Truman Clark, who noted Reily had two outstanding characteristics: tactlessness and superpatriotism. He carved a swath of alienation across the island, even saying of the mayor of San Juan, Roberto H. Todd, “He is a half-blooded Negro . . . and is living with a woman of the streets.” Concerned more with financial gain through his salary and perquisites than with governing, he resigned in 1923 when he came under fire for misappropriation of funds.³⁸

Reily had been a bull in a china shop, but the next governor, Horace Mann Towner, was a diplomat who appointed Puerto Ricans to several leadership roles on the island. He was in favor of allowing Puerto Ricans to elect their governors, but was unsuccessful at moving that agenda forward with Washington. While an improvement

over Reily, Towner's stance was one of paternalistic tutelage, consistent with the prevailing American view of Puerto Rico.

A devastating hurricane, San Felipe II, struck the island in 1928, and the Great Depression was soon to follow in 1929. President Herbert Hoover appointed Theodore Roosevelt, Jr., son of the former president, as governor. Roosevelt had no difficulty reconciling US democracy with colonialism, but made an effort to learn Spanish, appointed many Puerto Ricans to government posts, and made efforts to ameliorate the grinding poverty of most Puerto Ricans. He was unsuccessful, and in 1932 he left to become governor of the Philippines, which he called "the greatest colonial possession that the United States has ever had," characterizing Puerto Rico as "an interesting problem by no stretch of the imagination solved."⁴¹

World overproduction of sugar caused instability in the market in 1932, and another hurricane struck. Suffering was rife, and conditions were ideal for the rise of the nationalist party, which advocated for Puerto Rican independence, through the use of violence if necessary. The Nationalist Party's leader, Pedro Albizu Campos, was born in Ponce and earned a law degree from Harvard. Albizu fanned the flames of discontent, speaking to throngs of striking workers in sugar and other industries. The governor appointed in 1933, Robert H. Gore, whose lack of competence or tact hearkened back to Reily, was bitterly and vocally opposed to independence and lasted only one year. The year 1933 is referred to as "Gore's Hell" in accounts of Puerto Rican history.^{37, 38}

In 1935, a protest against Albizu and the Nationalists called by students at the University of Puerto Rico in Río Piedras turned ugly, and five people were killed by police gunfire. Four of those killed were Nationalists, and Albizu and his followers

publicly promised to avenge their deaths. A few months later the US-appointed chief of police, Colonel E. Francis Riggs, was assassinated. Two Nationalists were arrested and killed by the police, who alleged they had attempted to escape. Albizu and several of his followers were tried for plotting to overthrow the government, and he was convicted and sent to federal prison in Atlanta.

General Blanton C. Winship was governor from 1934 to 1939, and he “considered it his duty to destroy the Nationalist party.” This had the effect of elevating the imprisoned Albizu to martyrdom status.³⁷ On Palm Sunday, 1937, a parade by the Nationalists at Ponce was fired on by police, and 19 people were killed. This event is known in Puerto Rico as the “Ponce Massacre.” In 1938, a Nationalist student fired at Governor Winship, but missed him and killed the chief of police instead. Morales Carrión states that Winship “. . . became permanently associated with the Ponce Massacre and with the policy of the mailed fist—the symbol of a sad, disturbing time of violence, reaction, and great human poverty.”³⁸

A key figure in Puerto Rican history, Luis Muñoz Marín, founded the Popular Democratic Party (PPD) in 1938. He began his political career as an advocate for independence, but split with Pedro Albizu Campos in the early 1930s, taking a pragmatic approach that was more conciliatory toward the US. He aligned himself with poor, rural Puerto Ricans, the *jíbaros*, and his campaign slogan was ‘*pan, tierra y libertad*’ (bread, land and liberty). He achieved majority status for the PPD in 1941, becoming president of the senate. He had made many campaign promises, but lacked the economic resources to make good on them.

In September 1941 Rexford Tugwell was named governor by Franklin Delano Roosevelt. He was the last of the “tutors,” assigned to teach the Puerto Ricans how to govern themselves. He possessed a strong intellect and much government experience, and argued in favor of allowing Puerto Ricans to elect their governor. The US entered World War II in December, and Puerto Rico became key to the defense of the mainland and Latin America. A marine blockade brought difficult times, with resulting food shortages, but also prompted greater US importation of Puerto Rican rum, providing some economic relief. Social and economic reforms were begun, and Muñoz’s PPD won a landslide victory in the 1944 election. There were two factions within the PPD, one that favored commonwealth status, and one that advocated for independence by peaceful means. The split was complete in 1946 when the independence faction broke off and formed the Puerto Rican Independence Party (PIP).

In 1946, President Truman appointed the first native Puerto Rican as governor, and in 1947 Congress passed a law authorizing an elective governor. Luis Muñoz Marín became the first governor elected by the people, and Puerto Rico became a commonwealth, or as it is termed in Puerto Rico, “*estado libre asociado*” (ELA—free associated state) in 1952. Transformation of the economy from agriculture to manufacturing began in 1948 with *Operación Manos a la Obra*, known as Operation Bootstrap. Industrialization increased employment and average per capita income, but also resulted in rural-urban migration and increased numbers of Puerto Ricans moving to the mainland, primarily to New York City and its environs, where they would become *New Yoricans*.

Puerto Rico has had seven elected governors since Muñoz. The island has no voting member of Congress, but elects a resident commissioner every four years, who is a non-voting member of the US House of Representatives. In 2008, Puerto Rico has three major political parties, the *Partido Nuevo Progresista* (PNP—New Progressive Party), which advocates statehood, the *Partido Popular Democrático* (PDP—Popular Democratic Party) which favors continuing the commonwealth, and the *Partido Independentista Puertorriqueño* (PIP—Puerto Rican Independence Party). A new fourth party is also registered in Puerto Rico, the *Partido Puertorriqueños por Puerto Rico* (PPR—Puerto Rico for Puerto Ricans Party) but it does not have the influence of the three major movements.

Three plebiscites on the question of statehood were held in 1967, 1993 and 1998. While Congress has the authority to grant independence, as it did the Philippines in 1945, or statehood, as it did for Alaska and Hawaii, the plebiscites are non-binding. Puerto Ricans living in Puerto Rico, but not those living on the mainland, are eligible to vote in the plebiscite—which is the subject of controversy, as inclusion of the many Puerto Ricans outside Puerto Rico might substantially change the outcome, perhaps tipping the scales toward statehood. The 1967 plebiscite outcome was 60% in favor of the status quo, 39% for statehood and 1% for independence. In 1993, continuation of commonwealth status was favored by 48.6%, with 46.3% for statehood and 4.4% for independence. The most recent plebiscite in 1998 offered five choices: commonwealth with revocation of US citizenship, free association (not the same as the current commonwealth status), statehood, independence, earned nearly the same percentage as in the 1993 plebiscite, with 46.5% of the vote.⁴⁰ and “none of the above.” “None of the above” earned 50.3% of

the vote, but statehood earned nearly the same percentage as in the 1993 plebiscite, with 46.5% of the vote.⁴⁰

The economy of Puerto Rico is primarily industrial, accounting for nearly half of gross domestic product, eclipsing agriculture at just one percent. Tourism is an important contributor to the economy, with nearly 5 million tourist arrivals in 2004.⁴² The unemployment rate was 12% in 2002 (the last year for which annual data were available),⁴² compared to 5.8% for the same year for the US overall.⁴³ The percentage of Puerto Ricans living below the poverty line is not available because the US mainland formula is not applied, however, estimated gross domestic product per capita in 2007 was \$19,600, compared to \$46,000 for the US overall. The lowest state GDP per capita for 2007 was Mississippi, at \$24,477.⁴⁴

CHAPTER III

PROFESSIONS THEORY AND PHYSICIAN ACCEPTANCE OF PAS

Currently, physician assistants are not authorized to practice in Puerto Rico. The purpose of this research is to study the possible emergence of the physician assistant in Puerto Rico, by learning more about the social milieu of medical practice and the views of medical, managerial and legislative elites toward introduction of a new profession in the division of medical labor. At the core of the research is an attempt to develop a better understanding of medical work and the workplace, with a focus on the constellation of players in health care and the barriers or potential facilitators for acceptance of the physician assistant in Puerto Rico. A theoretical template will provide the framework for organizing that understanding into strategies for achieving diffusion of the PA innovation not just to Puerto Rico, but to any new market or environment. This theoretical framework may also enable the application of what is learned to other occupations seeking adoption in new settings.

Work is a fundamental aspect of the human condition. An occupation may require extensive education or no specialized skill; it may be a trade, requiring skilled labor or craft knowledge, or be further differentiated with respect to privilege, power and prestige and designated a profession. "Occupational roles locate individuals in social space, thereby setting the stage for their interaction with one another."⁴⁵ As Berger notes, "precisely because work has been for so long a fundamental human category, any particular work has been not only a means of livelihood but also a source of self-

identification.”⁴⁶ Since the Industrial Revolution, many occupations have become professionalized, increasing in status and prestige, often in association with increasing specialization. This section will briefly review the historical development of professions theory, and the various definitions and traits attributed to professions within the social organization of work.

The sociology of work, occupations and professions

The nature of work and its function in society has been considered by thinkers for much of human history. The concept of “division of labor” in Plato’s *Republic*, sets work in the context of human inequality.⁴⁷ Although characterized by the “father of economics,” Adam Smith, as a key aspect of industrialization, Karl Marx and Émile Durkheim were the first sociologists to grapple with the division of labor.

Marx saw the division of labor as a form of exploitation unique to capitalism, where workers toiled at repetitive tasks to create commodities to enrich the owners of industry, resulting in alienation.⁴⁸ Durkheim framed the argument differently, but also saw the division of labor as a moral question, with chronic *anomie* the result: a lack of community resulting from the mindless pursuit of tasks needed to maintain economies.

This “mechanical solidarity” was different from “organic solidarity,” the latter a sense of purpose and belonging associated with community, a form of social organization Durkheim saw as in decline.⁴⁹ Durkheim was born on the cusp of industrialization, and according to Larson, he saw in the professions the characteristics of community, a foundation capable of creating organic solidarity, with a “. . . social model that would produce the ethics and rules needed by a complex division of labor, and thus save modern society from the chronic anomie rooted in its economy.”⁵⁰

Sir Alexander Carr-Saunders and P. A. Wilson in 1933 reviewed all the fields of work that were thought of as “professions” in England at the time. The traits they delineated across these areas of work included specialized knowledge, complex and lengthy education, control of entry and ethical standards.⁵¹ This matrix would serve as the foundation for future professions theories, and as Abbott notes, “Work in this genre rapidly built the stock of case studies, fitting each case into the procrustean bed of essential traits.”⁴

Cogan (1953) reviewed the writing on professions, with special emphasis on judicial rulings in occupational and licensing disputes and on lexicographical definitions. Cogan weaves in the aspect of “calling,” which he describes as professing knowledge and allegiance to altruism in following an occupation. He reiterates the work of Carr-Saunders and Wilson with respect to complex education and a code of ethics, and interestingly cites Abraham Flexner’s inquiry as to whether social work was a profession. Cogan cites the attempts of Roscoe Pound to distance the term “professional” from the concept of “mercenary,” and reports on Dewey’s elevation of “amateur” above professional, as someone who “loves the activity for its own sake.” He arrives at the following definition of profession, which values generalism above specialism:⁵²

“A profession is a vocation whose practice is founded upon an understanding of the theoretical structure of learning or science, and upon the abilities accompanying such understanding. This understanding and these abilities are applied to the vital practical affairs of man. The practices of the profession are modified by knowledge of a generalized nature and by the accumulated wisdom and experience of mankind, which serve to correct the errors of specialism. The profession, serving the vital needs of man, considers its first ethical imperative to be altruistic service to the client.”

Goode (1960)⁵³ analyzed professions theory, including the work of Garceau (1941),⁵⁴ who in his study of the American Medical Association (AMA), argued that all professions theory had the common theme of eulogistic terminology, framing the occupation as praiseworthy. Goode synthesized professions theory to 1960 and delineated the following traits of a profession:

1. The profession determines its own standards of education and training.
2. The student professional goes through a more far-reaching adult socialization experience than the learner in other occupations.
3. Professional practice is often legally recognized by some form of licensure.
4. Licensing and admission boards are manned by members of the profession.
5. Most legislation concerned with the profession is shaped by that profession.
6. The occupation gains in income, power, and prestige ranking, and can demand higher caliber students.
7. The practitioner is relatively free of lay evaluation and control.
8. The norms of practice enforced by the profession are more stringent than legal controls.
9. Members are more strongly identified and affiliated with the profession than are members of other occupations with theirs.
10. The profession is more likely to be a terminal occupation. Members do not care to leave it, and a higher proportion assert that if they had it to do over again, they would again choose that type of work.

The 20th century American study of the sociology of work, occupations and professions had as its epicenter the University of Chicago. Chicago thinkers in the sociology of professions include Everett Hughes, Anselm Strauss, Eliot Freidson and later, Andrew Abbott.

Everett Hughes, in his seminal volume, *Men and Their Work*, published in 1958, defined professions in much the same manner as Carr-Saunders and Wilson, but adds the concept of social control: “The professions are entered by long training, ordinarily in a manner prescribed by the profession itself and sanctioned by the state. . . . The training,

however, carries with it as a by-product assimilation of the candidate to a set of professional attitudes and controls, and professional conscience and solidarity.”

Hughes argued it was necessary to begin the study of occupations from the point of least prestige, for example, those of janitors and other blue-collar workers, “since prestige is so much a matter of symbols, and even of pretensions—however well merited—there goes with prestige a tendency to preserve a front which hides the inside of things . . .” And he notes, “. . . no line of work can be fully understood outside the social matrix in which it occurs or the social system of which it is part.”⁵⁵

Hughes described the concept of “dirty work”—tasks within an occupation that are undesirable. “In any occupation, people perform a variety of tasks, some of them approaching more closely the ideal or symbolic work of the profession than others. Some tasks are considered nuisances and impositions, or even dirty work—physically, socially or morally beneath the dignity of the profession.”⁵⁵ Tasks may be undesirable because they are associated with undesirable clients or locations, creating a threat to occupational prestige. A profession may be more likely to cede “dirty work” to those outside the profession than part with more desirable, prestigious activities. The nature of “dirty work” changes over time, as new technologies are introduced, and what was once prestigious becomes routine.

Rue Bucher and Anselm Strauss in 1961 proposed a new sociological framework for the study of professions. They asserted that the sociology of professions had previously been purely functional, based primarily on hierarchical structure. They proposed a new “process” view of professions, and for the first

time considered the importance of conflict, which within their construct focused on conflict within a profession, or splintering of a profession into “segments,” which they regarded as a natural outcome of specialization.⁵⁶

Eliot Freidson emphasized dominance and autonomy, not the traditional elements of “calling” and altruism previously considered integral to a profession.⁵⁷ Magali Larson eschewed the ideology of altruism and devotion to societal good, instead calling specialized training, licensing, codes of ethics and collegial relationships mechanisms for gaining and retaining occupational prestige and social control of work. In her 1977 work *The rise of professionalism: a sociological analysis*, she focused on power and social control as fundamental to development and maintenance of a profession within the matrix of work and society.⁵⁰

Andrew Abbott (1988) focused more on interprofessional competition than previous professions theorists, through the concept of jurisdiction, the link between the profession and its work, and “the central phenomenon of professional life . . .” While a profession may resist encroachment and “claim full and final jurisdiction,” Abbott notes there are other possibilities for settlement of jurisdictional disputes. One profession may become subordinate to the other, professions may “divide labor into two interdependent parts,” one profession may allow the other “advisory control over certain aspects of the work,” or professions may divide their jurisdictions by nature of client. Abbott also noted that a profession may share jurisdiction when it is unable to effectively serve its entire market.⁴ For example, the law profession created paralegals to handle some of the

more routine aspects of law practice. This newer framework for understanding the professions and their interactions is about how work and tasks are allocated and shared, rather than a simplistic focus on a defender profession's exclusion and resistance to encroachment by claimants of turf.

The profession of medicine in America

The practice of medicine evolved from humble roots in the earliest days of the nation to a highly regarded science by the second half of the 20th century. This transmutation is the quintessential example of professionalization: the occupation of doctoring became the profession of medicine.

In colonial America, medical doctors trained through apprenticeships with practicing physicians. Disease and injury were the primary threats to health, and medicine had few options for treatment. In the 1800s, medical education in the US became more formalized, though it lacked Europe's increasing emphasis on science. Perhaps half the institutions granting medical degrees were proprietary schools that existed to profit from tuition, and medicine did not enjoy high status and prestige.

Abraham Flexner's review of medical education, funded by the Carnegie Corporation and published in 1910,⁵⁸ deplored the condition of medical education and effectively shut down more than half of US medical schools. Many of the shuttered institutions were the only options for African-Americans and women to become physicians. Medicine increasingly relied on science, including burgeoning discoveries in microbiology led by Koch, Pasteur and others, with a resulting increase in specialization. Botanical and homeopathic physicians were marginalized, and medical licensing, which had been eliminated in the 1800s, was reinstituted. By the 1920s, physicians increasingly

completed hospital internships. The AMA became a major political force, waging a campaign against patent medicines and establishing the physician as the source for medication through legally regulated prescribing. The supply of physicians contracted, and physicians gained in income and prestige.

Science and knowledge alone do not account for medicine's rise to power in the 20th century; Starr argues: "If the medical profession were merely a monopolistic guild, its position would be much less secure than it is. The basis of its high income and status . . . is its authority, which arises from lay deference and institutionalized forms of dependence."⁵⁹ Societal dependence was achieved through the process of professionalization: control of entry, education and regulation. By the second half of the 20th century, medicine was regarded by most professions theorists as the archetypal profession, or in Starr's words, "sovereign." Freidson called the mid-20th century the "golden age of medicine."⁶⁰

Hughes (1958) considered the autonomy of medicine, and the locus of control within the profession itself, in the context of the contemporary division of labor:⁵⁵

"If the physician has high prestige—and he has had it at various times in history, although perhaps never more so than now—it is not so much *sui generis*, as by virtue of his place in the particular pattern of the medical division of labor at the time. Two features of that division of labor at present are (1) that the level of public confidence in the technical competence and good faith of the medical system is very high and (2) that nearly all of the medical functions have been drawn into a great system of interlocking institutions over which physicians have an enormous measure of control."

In *Profession of Medicine*, Freidson (1971) also focused on medicine's achievement of autonomy and social control: ". . . the state has both made it illegal for other workers to compete with physicians and given physicians the right to direct the

activities of related occupations.” He notes, “. . . the more autonomous the occupation and the greater the overlap of its work with that of physicians, the greater is the potential for conflict, legal or otherwise.”⁵⁷

While Strauss, Freidson and other students of Everett Hughes at the University of Chicago considered the division of labor in medicine and health care as mechanisms of power and social control, Abbott took a systems view, analyzing when, why and how medicine chooses to share jurisdiction.⁴ He cites physician assistants as an example of creation of a subordinate group by a dominant profession, enabling “extension of dominant effort without division of dominant perquisites.”

A sea change in health care in America began in the mid-1960s, with the passage of Medicare and Medicaid and the inception of PAs and nurse practitioners (NPs), registered nurses with expanded medical functions. Freidson (2001) argues “During the last third of the twentieth century the virtually ideal-typical professionalism of American medicine was eroded, though it is still probably closer to the ideal type than all other occupations. Medicine has not lost its pre-eminent position in the official labor force.” He acknowledges the increasing use of alternative medical treatments such as acupuncture and chiropractic and development of new technologies make it “considerably more difficult for medicine to dominate and control many of the occupations in the health division of labor.”⁶⁰ Some argue that medicine is becoming “proletarianized” as a result of increasing government regulation, changes in provider-patient relationships as a result of consumerism, the demystification of

medical knowledge and the Internet revolution, increasing corporatization of health care delivery, and the increasing number of physicians working as salaried employees.^{61, 62}

The attributional, or “trait” approach to defining professions has been muddled by many of the changes in health care and the division of labor since the 1960s. Medical practice is increasingly achieved through teamwork, with new players such as clinical pharmacists added to the mix, and co-location of services such as physical therapy and mental health in the outpatient primary care setting. Strand, Cawley and Schneller argue a new professions theory is needed for the 21st century, utilizing a model of shared domains.⁶³

Physician acceptance of PAs

Initially created within the profession of medicine as direct subordinates to physicians and allowed to practice medicine where physicians were unable or unwilling to effectively serve, PAs are unique among professions in the medical hierarchy. While PAs are still found in medically underserved and rural settings, the majority are no longer in primary care and increasingly have followed physicians into medical specialties.⁶⁴ The original jurisdictions ceded to PAs were less desirable populations and locations, and may be regarded as “dirty work” as in Everett Hughes’ construct. In their 1989 analysis of 1,621 interviews with US physicians in 1981, Ferraro and Southerland found that physicians were most likely to regard care of rural residents or the urban poor as appropriate for PAs and NPs, and that physicians lowest in the hierarchy, especially foreign medical graduates, were most resistant to utilization of PAs and NPs.⁶⁵

Despite the nearly forty years of work that led to enabling legislation for PAs across the US, little research has been done to better understand the forces that lead to success or failure of these efforts. Physician attitudes toward NPs has received considerable attention,⁶⁶⁻⁸⁴ but relatively little research has been done regarding physician attitudes towards PAs.⁸⁵ While doctors have been used to viewing nurses in a subordinate role, PAs are an entirely new profession with no historical precedent. In a review of the literature from 1969 to 2006, only two studies were found that looked at physician attitudes toward both NPs and PAs.⁶⁵ The majority of the studies identified involved only NPs and used survey methodologies with extremely small sample sizes, with the research setting as small as one clinic.^{70, 73, 76, 79} Other studies were at the level of a county,⁸³ partial state,^{67, 68, 72, 78, 81, 82, 85} or state.^{66, 71, 74, 77, 80, 86, 87} Only four studies were at the national level, three in the US^{65, 69, 88} and one in the United Kingdom.⁸⁴ This limits generalizability of this body of research, though it may be argued that the recurrence of certain findings across a wide geographic range and more than two decades suggests their findings may be instructive.

The few studies that do include PAs do not consider them separately. While PAs and NPs are often lumped together in a category called “midlevel practitioner” or “physician extender,” there are important educational, philosophical and political differences. First, PAs are trained in the medical model, while NPs are trained in the nursing model. The average nurse practitioner program is 50 credit hours in length and requires 300 to 500 hours of clinical education. Physician assistant programs average more than 100 credit hours with more than 2,000 hours of clinical training. Vocal factions within the NP profession advocate independent practice,⁸⁹ and the recent move toward a

“practice doctorate” for NPs has at its core the desire for independence.⁹⁰ Physician assistants are dependent practitioners who practice medicine with physician supervision, through negotiated performance autonomy.⁷ Because PAs do not seek independent practice, and adhere to the medical model, they may be seen by physicians as less threatening, therefore application of research findings regarding physician acceptance of NPs to PAs should be regarded with skepticism. One study in this literature review suggested that physicians were more accepting of PAs than NPs.⁸⁵ These important differences between the two professions make extrapolating research regarding NPs to PAs problematic. From this perspective, what remains is a near absence of research regarding physician attitudes toward PAs. With that caveat in mind, some observations of the findings of the identified studies are useful as research regarding PAs is contemplated.

Physician experience with NPs and PAs is correlated across many studies with increased receptivity or acceptance.^{75, 76, 78, 80, 81, 83} Younger physicians, those who completed their medical training more recently (admittedly, there is a great deal of overlap of these two groups), and those in urban or group practice settings were more receptive to PAs and NPs across several studies.^{68, 72, 75, 80, 82} One study, however, found favorable attitudes toward PAs and NPs by physicians caring for the poor, who had no association with group practice.⁷¹

Physicians’ positions in the social hierarchy of medicine have been found to influence receptivity, with physicians of lower occupational prestige (foreign medical graduates, those serving the poor) less accepting of PAs and NPs.^{65, 91} It is important to note that Ferraro and Southerland’s study, which argued this finding most strongly, used

a large national series of 45 minute physician interviews, and thus offered a richer source of attitudinal data than other studies. Their analysis of 1,621 physician interviews by Louis Harris and Associates in 1981 concluded that physicians were more receptive to delegating domains of medical practice that were “envisioned as less desirable and rewarding . . . controlling the desirability of one’s work influences the limits of what is considered legitimate work for [PAs and NPs]”—hearkening back to Hughes’ “dirty work” construct. Physicians were willing to accept PAs and NPs in undesirable (rural) settings caring for less desirable (poor) populations. Physicians lower in the medical hierarchy (foreign medical graduates, especially more recent arrivals and those caring for the poor) were more resistant.⁶⁵ This study, though it analyzed data from 25 years ago, is the only one of its kind, and offers potential insight into why physicians in Puerto Rico might oppose enabling legislation for physician assistants.

CHAPTER IV

MEDICINE AND HEALTH CARE IN PUERTO RICO

Prior to the US occupation in 1898, health care and the practice of medicine in Puerto Rico were based on the Spanish model and controlled by Spain. The care of the sick was pluralistic and loosely structured among physicians, *curanderos* (folk healers), *curiosos* (people who found medicine interesting and dabbled in it), *parteras* (birth attendants) and *comadronas* (midwives), as well as *practicantes*, who occupied a position that would be defined as “mid-level” today, analogous to the physician assistant.⁹²

The *Real Subdelegación de Medicina*, or Royal Subdelegation of Medicine, was established in 1839 to control licensing of physicians. Physicians were stratified by training and population served into two categories: elite private practice physicians, and municipal physicians who were casually trained, assigned to a municipality and provided a salary to care for the poor and fulfill public health functions. Municipal physicians were also required to supervise five *practicantes*. In cases where there was no municipal physician, private practice physicians were required by law to provide care to the poor. Elite physicians were academically trained, and further divided into the top echelon, those trained in Europe, and those of lower wealth and prestige trained in Cuba, Santo Domingo or Venezuela. There were no medical schools in Puerto Rico.^{93, 94}

Physicians in Puerto Rico, and elsewhere in Latin America, were often actively involved in politics. A notable Puerto Rican example is Ramón Emeterio Betances, the architect of the famed “Grito de Lares” uprising. Elite physicians chafed under Spanish

colonial rule, which threatened their autonomy, and they met clandestinely in pharmacies to discuss politics and possibilities for revolution. They called these meetings *tertulias*, a salon or circle of intellectuals.⁹³

Municipal physicians also found Spanish control of their appointments offensive. In this political milieu, the overthrow of Spain by the US was welcomed, and physicians had high hopes for improvements in autonomy and professional control of medical practice. As advocates for political change, they were initially optimistic that the US victory in the Spanish-American War would result in improved social conditions and democratic reforms, as well as greater autonomy of medical practice. The reality would turn out to be different.

In 1899, one year after the US was ceded Puerto Rico by the Spanish under the Treaty of Paris, the San Ciriaco hurricane devastated the island. Those living in the mountains and outlying rural areas migrated to urban centers in pursuit of work and food supplies. This upset the balance of medical practice, as municipal physicians and the panoply of *curanderos* and other alternative providers also migrated to the cities, threatening the economic viability and authority of elite medical practice. Amid this confusion, US health officials declared Puerto Rico's physicians unscientific and thus substandard.

Complicating matters, the Foraker Act in 1900 established all aspects of government, with the exception of medical regulation. The Foraker Act did establish the Superior Board of Health, which then created a new system of medical licensing. The first licensing exam was in English, based on the New York University exam, imposing a new language and culture on physicians, many of whom had trained in Europe, and to a

lesser degree, the US.⁹³ This marginalization of Puerto Rican physicians is particularly ironic, given that Abraham Flexner's evaluation of medical education in the US would not occur until 1910—when he would report that many physicians in America had for all practical purposes purchased their diplomas from proprietary medical schools.

The assault on the profession of medicine in Puerto Rico was met with the creation of the *Asociación Médica de Puerto Rico* (AMPR) in 1902, with the intent of reestablishing the identity of physicians in Puerto Rico. The AMPR did not intend to become part of the AMA, though it ultimately did in 1912. “Puerto Rican physicians sought to control the threats to their professional power, status and autonomy . . . to continue their social position they had enjoyed during the nineteenth century and maintain their former status as technically qualified leaders among the elite.”⁹³

After the San Ciriaco hurricane, physician Bailey K. Ashford was brought in by the US Army to set up a tent hospital to care for the sick and injured. He reported that three fourths of the patients admitted were suffering from anemia, which he traced to the endemic hookworm, or uncinariasis. The rural populations were most affected, as they often lacked shoes, and hookworm's route of infection is through skin contact with fecally-contaminated soil. The archetype of this rural population was the *jíbaro*, a barefoot peasant with tattered clothing and a straw hat. Nicole Trujillo-Pagan, however, points out that Ashford's anemia campaign, with American medical science rescuing the “backward” *jíbaro*, promoted Americanization, “a hegemonic US ideology that legitimates Puerto Rico's colonial status.”⁹³

Ashford is widely admired in Puerto Rico, and a major thoroughfare in San Juan is named after him. Ashford's work in Puerto Rico came as medicine in America was

moving toward becoming a science, and he became a mythic figure, eclipsing the accomplishments of Puerto Rican physicians prior to his arrival. For example, Francisco Oller introduced smallpox vaccination in 1903, the first in Latin America.⁹⁵ Puerto Rican physicians' tradition of clinical observation was unable to resist the inexorable move toward bacteriology and the supremacy of the microscope.

Medical education in Puerto Rico

The Anemia Commission was established in 1904, and the Institute of Tropical Medicine was created in 1912. In 1926 it became the School of Tropical Medicine in the University of Puerto Rico, sponsored by Columbia University in New York.⁹⁶ The school's focus was on research in tropical diseases, but it was not a medical school. With US entry into World War II, many Puerto Rican physicians were called into military service, putting an even greater strain on a limited physician workforce. Physicians were allowed to immigrate from around the Caribbean to alleviate the physician shortage.

“It is important to mention that during the years of the Second World War, the government of Puerto Rico could not avoid . . . various of the practicing physicians in Puerto Rico being called to serve in the medical corps of the armed forces of the United States, leaving Puerto Rico deprived of adequate medical services. This brought, as was to be expected, a chaotic situation in the medical services in Puerto Rico and the government of Puerto Rico proceeded to import physicians from the neighboring Caribbean islands, many of them without necessary qualifications and some with falsified credentials.”⁹⁷

Concerns about the quality and competence of these immigrant physicians presaged issues that would arise in the 21st century, as Puerto Rico would continue to rely on this strategy to assure an adequate physician workforce.

Another result of the physician shortage during World War II was a renewed movement to establish a medical school in Puerto Rico, to be associated with the School

of Tropical Medicine. A study commission, headed by Dr. Oscar Costa-Mandry, issued a report in 1942 favoring a new medical school, and two years later Costa-Mandry was charged by the Superior Education Council of the University of Puerto Rico with a feasibility study, which was released in 1944. The report recommended a limited enrollment, “Class A” institution.⁹⁸ The movement for a medical school was a struggle, with opponents inside and outside Puerto Rico doubting the capacity to accomplish this, derisively suggesting that proponents wanted “to change a School of Tropical Medicine into a tropical school of medicine.”⁹⁹ The proponents ultimately prevailed, and the first class of medical students matriculated in 1950.

There are now four medical schools in Puerto Rico. The only public medical school is the University of Puerto Rico at Río Piedras, established and fully accredited in 1949. In addition to the University of Puerto Rico there are three private institutions. The Universidad Central del Caribe School of Medicine, Bayamón, was founded in 1976 and accredited by the Liaison Committee on Medical Education (LCME) in 1979. Originally developed by the Pontifical Catholic University of Puerto Rico, the Ponce School of Medicine was accredited by LCME in 1981. San Juan Bautista School of Medicine in Caguas was established in 1978, but did not achieve full accreditation by the LCME until 2007.

Puerto Rico’s health care system

Historically, Puerto Rico’s health care system followed the philosophical, cultural and organizational approach of Spain. Key aspects of the Spanish system included co-location of personal health care and public health functions, with the municipal physician

or *practicante* responsible for both at the local level, with funding provided by the municipal governments. This structured was formalized in 1814:

In 1814 Sanitary Commissions were organized in all municipalities. They were composed of a physician, the town judge, the priest, the military commander, and two ‘honored citizens’. In the absence of a physician, a *practicante* was called upon to serve on the commission.¹⁰⁰

The Spanish tradition in Puerto Rico also held that health care is a human right, that services should be provided to anyone who needs them, and this mandate extended to provision of public health and preventive services as well. As Guillermo Arbona noted in his memoir:

In the United States, curative personal health services are considered as separate from preventive ones. In Puerto Rico, since these services began to be organized many years ago, the government has considered them as one service, assuming total responsibility for providing curative services to “medically and economically needy persons” and for preventive services. In the United States these are considered social services.¹⁰¹

Bailey K. Ashford’s effort to eradicate hookworm infection in the island in the early 1900s led to the creation of rural outposts, as clinical services were established in remote areas of the mountains where hookworm infection rates were highest. It was the first move toward regionalization of health services after the US occupation, though not pursued toward that specific aim.

In 1920, the Lord Dawson report was published in England, which argued that health care should be organized in three tiers: primary health care centers, which would provide both curative and preventive services, secondary centers for more difficult cases, and teaching hospitals, where the most complex cases would be referred, in what is now termed tertiary care. A young public health physician named John B. Grant took notice of

this work—and he would later work with physician Guillermo Arbona to apply Dawson’s concept to Puerto Rico.¹⁰²

As the Great Depression took its toll on the health of Puerto Ricans, their Department of Health asked the US Public Health Service to evaluate health and medical care on the island. A study led by Joseph W. Mountin recommended in 1937 that preventive measures be applied to decrease endemic infections, that nutritional status be improved, and that health care be organized into districts. By 1940, four general hospitals had been built in Fajardo, Bayamón, Arecibo and Aguadilla,¹⁰³ with each assigned a catchment area of municipalities in their districts. In 1940, Luis Muñoz Marín was elected president of Senate, becoming “the undisputed political leader of Puerto Rico.”¹⁰⁰

World War II brought challenges and opportunities. Many Puerto Rican men who volunteered for military service were rejected because of chronic illness or malnutrition, delivering a wake-up call to the island’s government. Increased sales of rum to the US, with excise taxes going to the Puerto Rican government, provided funding for industrialization. At the end of the war, *Manos a la Obra*, the industrialization campaign called Operation Bootstrap in the US, swung into action. The passage of the Hill-Burton Act in 1946 provided funding for hospitals and health centers. In 1947, the Bureau of Hospital Survey and Construction of the Department of Health recommended organizing health services in Puerto Rico by service areas. In 1949, Luis Muñoz Marín took office as Puerto Rico’s first elected governor.

In 1950, President Harry S. Truman signed into law an act permitting Puerto Rico to write its own constitution, though it was to remain a colony of the United States. This act established Puerto Rico as a Commonwealth, or as it is called in Puerto Rico, *Estado*

Libre Asociado (ELA), or “free associated state.” In the new constitution, the cultural and philosophical belief that health care is a human right was once again demonstrated.

As originally drafted, the constitution provided for a bill of rights which included the right to health care. Because the document was in the nature of a contract between the United States and the people of Puerto Rico, the constitution had to be approved by both parties. Once approved by the Puerto Rican electorate, it had to be ratified by the US Congress. Several US legislators objected to the inclusion of the right to health care as part of the constitution; consequently, this section was deleted in the version that was eventually approved.¹⁰⁰

In 1955, a study of health and health services in the Bayamón District Hospital catchment area, led by Guillermo Arbona in collaboration with John B. Grant and others, was published. This broad survey of health services and indicators was predicated on the assumption that “regionalization of services at the district level, with improved coordination and integration of present agencies and facilities, would allow better utilization of present resources and hence the furnishing of better care to more people.” It also aimed to “set benchmarks for future evaluations of the progress toward higher quality health services for the Bayamón area.”¹⁰⁴ The report recommended reorganization of health care services in the district, to improve coordination and access to care through a regionalized model. With funding from the Rockefeller Foundation, the pilot project in Bayamón was begun in 1956. Arbona was named Secretary of Health by Governor Luis Muñoz Marín in 1957.

The design for the system is described by Arbona and Ramírez de Arellano in their monograph on regionalization in Puerto Rico:

The allocation of functions by level began at the bottom and proceeded upward. As the point of entry into the health system and the cornerstone on which the organization rested, the local health centre was designed to provide a wide range of services. Only when it was evident that a given function was beyond the capability of the primary level, or uneconomical

for a limited population, was it assigned to a higher level. The regional hospital was thus planned to ‘backstop’ or support the front line of primary care.¹⁰⁰

The regionalization scheme was subsequently applied to the entire island in 1960, divided into five regions. The districts were based on the four hospitals built as a result of the Mountin study, with the addition of a hospital in Ponce. Community-based physicians were given the opportunity to study public health at Columbia University and elsewhere. The structure of the system was based on three tiers:

Table 1
Regionalization of health care services in Puerto Rico, 1960¹⁰⁰

Level of care	Tier	Services	Area served
Primary	Local health center	Primary care, prevention, public health, outpatient	1 municipality
Secondary	Regional center	Specialty and hospital services	12 to 20 municipalities (population 350,000 to 900,000)
Tertiary	Central (Puerto Rico Medical Center, Health Department)	Complex, specialized hospital services, policy, advisory, coordination of care	Commonwealth (population 2 to 3 million)

The system would go through several iterations, buffeted by political forces and categorical federal funding for social and health services. In Puerto Rico, the regional system of the 1950s through 1990s is referred to as “the Arbona system.” The visionary program was successful to a great degree, based on health outcomes (see following section on health indicators), and is widely reported in Puerto Rico to have served as the model for the Cuban health care system and the systems of several Eastern European

countries. As Hector Acuña and Kerr L. White observe in their preface to Arbona and Ramírez de Arellano's monograph on regionalization of health care in Puerto Rico:

There are few examples of a developing country deliberately setting out to create a balanced set of health services that embrace all levels of care from basic, primary, or general care, through secondary or hospital care and its supporting services, to university medical centre care, all related in accordance with the concepts and practices of regionalization. Rarely in the health care literature is it possible to trace the origins of new ideas for the provision of health care from their conceptual phases through the trials and tribulations of implementation. Still rarer are accounts of the extent to which those ideas have been bolstered with facts and figures in planning the services and in assessing the impact of change. Indeed, Puerto Rico may well be the first country to have used population-based health statistics, especially those derived from surveys, to guide the planning of its health care system.¹⁰⁰

Organized medicine in Puerto Rico, represented by the AMPR, opposed the regionalization of health care from its inception, decrying the project as “socialized medicine,” and demanding “free choice and fee for service.” The AMPR attacked the Department of Health and Guillermo Arbona personally, even leveling allegations of misallocation of Hill Burton funds (federal dollars to support the establishment of new hospitals) in the construction of the Puerto Rico Medical Center.¹⁰¹ Arbona and Ramírez de Arellano observe:

Organized medicine has traditionally been very attentive to any developments which may have an effect on the prestige and economic status of its constituent members. The Puerto Rico Medical Association is no exception to this general rule, and its leadership was on the alert for any developments in regionalization that could be construed as threatening to the medical profession . . . [The AMPR] chose to express its views in its monthly bulletin . . . Under the alarmist title of ‘The Threatening Monster’, an editorial published in February 1958 described the regionalization plan and the financial scheme proposed . . . as an attempt to limit the free choice of physician and institute a regimented system of government medicine. Characterizing the organizational reforms as a ‘hydra-headed monster’ and a ‘wolf in disguise’, the editorial particularly opposed the possibility of using public hospitals to care for non-indigent patients.¹⁰⁰

In 1958 the AMPR and the AMA passed resolutions demanding the Rockefeller Foundation withdraw its support for regionalization, citing it as a threat to American medicine. The Rockefeller Foundation, continuing its support, observed that the AMPR's opposition was really to universal coverage, and not to the structure of service delivery, and that it was based on "a combination of ignorance and of pocketbook, more the latter".¹⁰⁰

After a remarkable 28 years of political stability, Muñoz and the PPD suffered an electoral defeat, and Luis A. Ferré of the PNP was sworn in as governor in 1968. During the campaign, Ferré had promised the AMPR that he would end regionalization of health care,¹⁰⁰ though complete dismantling proved to be more difficult than Ferré had anticipated. However, rising health care costs and the epidemiologic transition from infectious to chronic disease due to the change from an agricultural to an industrial economy, as well as inexorable political forces, slowly eroded the original Arbona system. The transformation would be complete when, after reversals in gubernatorial power from one party to another over the course of years, Pedro Rosselló was inaugurated as governor in 1993. Though he is widely blamed for dismantling the Arbona system, its demise had clearly been many years in the making.

Pedro Rosselló González, a pediatric surgeon and former collegiate tennis champion, ran for governor in part on a campaign promise to provide a *tarjetita*, or insurance card, to every Puerto Rican. The stated aim was to offer greater choice to the medically indigent covered by the Commonwealth, based on widespread dissatisfaction with the two-tiered system of public and private coverage and its associated inequities. After his election, Rosselló achieved passage of Law 72 of 1993, *La Reforma de Salud de*

Puerto Rico, a sweeping redesign of the health care system based on managed care with full capitation risk assigned to primary care physicians.

At the same time, a vast and sweeping health care reform was being proposed in the US mainland. A Congressional field hearing held in Río Piedras in March 1994 reveals how hopeful legislative and health care leaders were about the proposed Clinton health plan, and *La Reforma* was clearly designed in parallel. Several who testified at the hearing suggested that Puerto Rico would be the ideal test bed for a pilot of the Clinton plan. The Executive Director of ASES (*Administración de Seguros de Salud de Puerto Rico*, the Puerto Rico Health Insurance Administration) used the Clinton phraseology in his testimony: “Under the leadership of our Governor, Dr. Pedro Rosselló, we have implemented our health care reform based on choice, non-discrimination and *managed competition* (emphasis added).” *La Reforma*’s legislative language states that the legislative intent is “radical reform.”¹⁰⁵ As a PAHO analysis described the system redesign in 2007, under *La Reforma* “the service model was transformed from a public services model financed by the Government to one in which Government-financed services were subcontracted to private health care providers.”¹⁰⁶

The intent and specific language of Law 72 was to “follow the existing regionalization system of the [Health] Department . . . ensuring the closest possible services to the patient.”¹⁰⁵ As a result of *La Reforma*, area and regional hospitals, as well as primary care centers (CDT, centers for diagnosis and treatment) were sold to private interests. Eighty percent of facilities are now privately owned; the only facility now completely funded by the government is the University of Puerto Rico Medical Center in Río Piédras. Despite increasing discontent among physicians, *La Reforma* continued to

enjoy the support of the population because of its generous benefits package. Rosselló served as governor without serious challenge until 2001.

Governor Sila Calderón, who served until 2005, tried to rein in the burgeoning cost of *La Reforma* by cutting benefits and the number of persons eligible. Although the benefits package is generous, and in theory beneficiaries enjoy free choice of facility or physician, many of the privatized facilities and private practice physicians refuse to accept the plan because of low levels of reimbursement. *La Reforma* has become increasingly unpopular and costly, but many Puerto Ricans are covered by the system and are reluctant to trade it for an unknown alternative. The financing structure and *La Reforma* are discussed in more detail below.

Puerto Rico health indicators

Health status improved dramatically in Puerto Rico from 1950 through the period of regionalization, though as Guillermo Arbona observed, “the effects of the organization and delivery of health services cannot be disentangled from the effects of concurrent changes in the population’s social, economic, and environmental conditions.”¹⁰⁰ Exceptions to the improvement trend have been diseases resulting from sedentary lifestyles, reflecting the epidemiologic transition due to the shift from an agricultural economy to one based on services and manufacturing. Below are selected health indicators for Puerto Rico, for which statistics are available. 1950, 1960 and 1970 are from the Department of Health of Puerto Rico,¹⁰⁰; 2004 for Puerto Rico and US overall are from State Health Facts, the Henry J. Kaiser Family Foundation.¹⁰⁷

Table 2**Selected health indicators, Puerto Rico, 1950 - 2004**

Health indicator	1950	1960	1970	2004	2004 US overall
Birth rate per/1,000 population	38.5	32.2	25.0	13	14
Infant mortality/1,000 live births	68.3	43.7	28.5	9	7
Heart disease/100,000 population	104.1	115.2	155.3	164	217
Deaths due to cerebrovascular disease/100,000 population	31.7	46.4	46.5	45	50

Health status indicators have in general continued to show improvement in the last two decades, with declines in infant mortality, breast and cervical cancer incidence and deaths, and prevalence of HIV/AIDS and tuberculosis. However, low birth weight infants as a percentage of live births increased from 9.6% from 1990 to 1994, to 11.5% from 2000 to 2004. Maternal mortality has fluctuated, with 14.5 maternal deaths per 100,000 live births 1991-2004, and a rate of 17.6 per 100,000 live births in 2004, but a PAHO analysis revealed serious underreporting, and maternal mortality rates may actually be double that reported by the Health Department. Of note, the rate of caesarian births in Puerto Rico for 2004 was 47.7%, close to the highest in the world.¹⁰⁶

Health care financing and reimbursement

In 2003, the most recent year for which data could be obtained, Puerto Rico spent \$12.2 billion on the health sector, 16.4% of gross domestic product (GDP),¹⁰⁶ as compared to the US overall at 15.2%, the highest of Organization for Economic Cooperation and Development (OECD) countries.¹⁰⁸ The Health Reform Evaluation Commission created by Governor Aníbal Acevedo Vilá in 2005 reported that Puerto Rico's health spending as a percentage of GDP was the highest in the world.¹⁰⁹ Health costs for those covered by public insurance are funded by the Commonwealth, municipal

and US federal governments. For fiscal year 2002-2003, 72.6% of funding came from the Commonwealth's General Fund, 14.8% from Medicaid, 10.6% from municipalities, and 2% from the State Children's Health Insurance Plan (SCHIP). Private spending provides the majority of financing for the health care system, from both personal expenditures and employer contribution to health insurance premiums.¹⁰⁶

For 2003, percentage distributions of medical plans in Puerto Rico are shown below:

Table 3
Percentage distribution of the population of Puerto Rico by type of medical plan, 2003¹⁰⁶

Type of medical plan	Percentage of population covered*
<i>La Reforma</i> (public plan)	40%
Private insurance	37%
Medicare	9%
Public employees	12%
Veterans	4%
Uninsured	8%

The percentage of uninsured, at 8%, compares favorably to the US overall for the same year, of 15.6%.¹¹⁰

Medicaid in Puerto Rico differs from the mainland US in several respects. Federal funds are awarded as a block grant, and account for only 15% of expenditures on those classified as medically indigent in Puerto Rico. Insular areas receive a capped grant, a source of contention among Puerto Rico's leaders for many years. Although the cap is increased periodically, an analysis by the Puerto Rico Department of Health in 1994

* Total is greater than 100% due to dual eligibility.

revealed that in inflation-adjusted dollars, the effective annual amount had decreased from \$20 million in 1967 to \$14.1 million in 1993.¹⁰⁵ Overall US per capita spending on Medicaid was \$627, but just \$56 for Puerto Rico.¹¹¹ Puerto Rico's leaders have been saying for many years that the Medicaid share for Puerto Rico should be 50-50, not 85-15.

Medicaid funds are administered through the director's office in San Juan, with oversight by the New York Regional Office of the Centers for Medicare and Medicaid Services (CMS), perhaps reflecting the historic connection between Puerto Rico and New York. ASES handles contracts and negotiations, monitors quality and eligibility, and assures compliance with regulations and federal mandates. The poverty level in Puerto Rico is set by the Commonwealth at \$400 per month for an individual, half of the federal poverty level. At the same time, the Commonwealth-funded portion of the plan covers persons not considered medically indigent in the federal system, such as college students, housewives and part time workers. A total of 1.6 million people are covered under *La Reforma*.¹¹²

La Reforma's benefit package includes primary and specialty care, with referral by the primary care provider required for specialist care. The primary care provider is fully at risk under a per member per month capitated arrangement, except for catastrophic illnesses. The target patient panel according to ASES is 1700 members per primary care physician. Practices are organized in independent practice arrangements (IPAs) for contracting and negotiations with ASES.

There are currently two service models; the prevailing model is direct contracting by ASES, but some recent pilots are utilizing third party administrators with some

improvement in efficiency and cost effectiveness.¹¹² Pharmacy coverage is administered by pharmacy benefit managers, and mental health is administered by managed behavioral health organizations, as these services are carved out of the plans administered by ASES.¹⁰⁶

A study commissioned by Governor Aníbal Acevedo Vilá in 2005 revealed several problems with *La Reforma*, among them: difficulty with access, inefficiency and inequity, poor quality of prevention services, erosion of the physician-patient relationship, and dissatisfaction among both providers and beneficiaries. While insurance coverage is one determinant of access, there are many others, including behavioral and cultural characteristics.¹¹³

In the 2005 study, it was noted that the capitation scheme, which assigns full risk to the primary care physician at low levels of payment per member per month, poses ethical dilemmas that may be resulting in denial of services or referrals. For example, a primary care physician will lose income by referring patients to specialists or prescribing expensive medications. Another unintended effect of *La Reforma* has been a contraction of available clinical placements for medical students and residents due to privatization of the majority of hospitals. The carve-out of mental health benefits has resulted in severe fragmentation of service. The commission concluded that the health system in Puerto Rico in 2005 was ineffective, inefficient and inequitable.¹⁰⁹

Strengths cited by the Pan American Health Organization (PAHO) report of 2007 were the generous benefit package, catastrophic coverage and freedom of choice of provider. Services are available under the plan in all 78 municipalities, and drugs are

provided at low cost. The plan covers the health care needs of much of the population, resulting in relatively low levels of uninsurance compared to the mainland US.¹⁰⁶

As one public health expert writes:

. . . the sustained increase in government spending for health services has not achieved a reduction in the problems confronting the beneficiaries of *La Reforma* with waits in emergency rooms or for medical appointments, among others. Participating providers complain that the insurance companies don't pay adequate rates . . . now thirteen years since the introduction of *La Reforma*, significant changes in its design or operation have not occurred . . . *La Reforma* has been more valuable as a political strategy than as a social or health initiative.¹¹⁴

Physician workforce and medical regulation in Puerto Rico

The supply of physicians in Puerto Rico steadily improved from the 1940s through the 1990s, aided by the establishment of four medical schools and immigration and medical regulatory policies that allowed graduates of medical schools outside Puerto Rico or the mainland US, which include many Puerto Rican citizens, to readily gain a license and practice in the Commonwealth. In 1950, there were 750 physicians to serve a population of 2 million people, a ratio of 1:2666,¹⁰³ or approximately 37 physicians per 10,000 population. By 1960 the ratio was 1:1300, and in 1970, 1:900.^{100*}

Puerto Rico's medical schools graduated 208 physicians in 2005.¹¹⁵ The number of physicians immigrating to Puerto Rico from outside the US could not be determined. Puerto Rico maintains an unusual regulatory stance toward graduates of foreign schools which are not accredited by the LCME. While most US jurisdictions require passage of all steps of the United States Medical Licensing Exam (USMLE), which is only administered in English, Puerto Rico allows candidates for licensing to take a "local board," which is administered in Spanish. In terms of residencies, most US jurisdictions

* Historical data regarding physician supply are available only as ratios, characterized as estimates, without actual numbers used to calculate them.

require completion of three years of an accredited residency. Puerto Rico allows physicians to complete a one year residency, and does not require these residencies to be accredited. These unaccredited residencies are sometimes called *internados criollos*, or “creole internships,” referring to their unique status in Puerto Rico.

Information regarding the number of practicing physicians in Puerto Rico is extremely difficult to obtain. The *Tribunal Examinador de Médicos* (TEM, the Board of Medical Examiners) has no web site or electronic contact information. Those who compile the AMA Masterfile on physicians throughout the US have no information after 2005. This is no doubt due to recent turmoil at the TEM. While rumors and allegations of corruption in the *Tribunal Examinador de Médicos* (TEM, the Board of Medical Examiners) have swirled for years, in August 2007 federal authorities arrested 88 people connected with the TEM, for fraudulently awarding passing scores on the “local board” examination.¹¹⁶ By late October 2007, the number indicted climbed to 112, and included two former board presidents and its executive director.¹¹⁷

Despite several telephone calls and two visits to the TEM in January 2008 requesting statistical information, data about the number of physicians currently practicing in Puerto Rico could not be obtained directly from the regulatory agency. Information presented by the Colegio de Médicos Cirujanos de Puerto Rico (Colegio) to a continuing education conference for certified public accountants in March 2007 provided numbers for 2006 (this data is likely quite reliable, as by law any physician practicing in Puerto Rico must be a member of the Colégio, and it has a quasi-regulatory role):¹¹⁸ 10,408 members, minus 492 retired, incapacitated or inactive licenses, and 964 in the US, gives a total of 8,952 actively practicing physicians. With a population of 3.9

million in 2006,¹¹⁹ this equates to 22.8 physicians per 10,000 population, or for historical comparison, 1:439. As a comparison, for US overall there are 23 physicians per 10,000 population.^{120, 121}

Other important aspects of the physician workforce in Puerto Rico include the specialty mix and physician flight to the US. According to the presentation by the Colégio in 2007, the physician workforce in 2006 was 62% specialists and 38% generalists. While the term *generalista* appears on the surface to indicate a general practice physician, such as a physician trained in family medicine, general internal medicine or general pediatrics, in Puerto Rico it has a different meaning. *Generalistas* are those physicians trained outside the US who passed the “local board” and completed a one year residency. While some *generalistas* may do a one-year accredited residency, such as the year-long transitional residency completed by pathologists and radiologists before specializing, most *generalistas* have only completed *internados criollos*.

Physicians are leaving the island in large numbers. The Colégio presentation stated that 39% of physicians in Puerto Rico consider emigrating, and that in the three years prior to 2006, Puerto Rico lost at least 2,000 physicians.¹¹⁸ Reasons cited are low levels of reimbursement, inadequate practice support, including an inadequate nursing workforce, malpractice risks, and mainland US salaries that are often double what physicians earn in Puerto Rico.

The *practicante*: Puerto Rico PA prototype

Ironically, the last large jurisdiction in America yet to authorize physician assistants had one of the most robust historical examples of a PA-prototype in the world, dating back to the 16th century. Norman I. Maldonado, MD, former President of the

University of Puerto Rico and Chancellor of the Medical Center, observes: “Soon after its discovery in 1493 until the nineteenth century, health care in the island was given by physician assistants called “*practicantes*” controlled by the municipalities.”¹⁰³ The role of the *practicante*, adopted from Spanish tradition, was supervised by a physician or surgeon and occupied a position we would describe as “mid-level” today. Costa-Mandry notes that “the profession of *practicantes* in Puerto Rico began as a consequence of the lack of physicians, the great number of patients under their [physicians’] care and the need for a person who could provide services urgently in [their absence].”¹²² Ramón Emeterio Betances, a physician trained in France who later became a leader in the independence movement in the mid-1800s (*Grito de Lares*) utilized a *practicante*, listed in historical records as Juan B. Ventura.⁹⁴

Practicantes were typically located in rural areas, while physicians practiced in the more populous urban centers. Practicantes’ duties included pulling teeth, minor surgery and care of the acutely ill. Arana-Soto provides documentation of the role of the surgical *practicante*, which would ring true today for a physician assistant in any practice setting: “It is your obligation to treat the sick and injured as soon as they arrive at the Hospital, and if the [level of injury] requires it, involving the surgeon by notifying him of the diagnosis and treatment you have provided.”⁹⁴ A clinical manual for *practicantes* published in Spain in 1951 speaks to their social role: “In all your activities, obedience, respect and submission to the physician will be the basis of professional regard, but in no case should this become servility or adulation . . . The auxiliary mission requires a decided spirit of collaboration between physicians and their helpers for the benefit of the sick.”¹²³

The practicante was officially authorized by Spain's *Subdelegacion* in 1839, and continued to exist until 1931, when the Puerto Rico legislature passed a new law regulating the practice of medicine, and eliminated practicante. As Abbott describes, jurisdictions which have been shared may later be closed.⁴ In 1942, when expansion of public health and medical education at the University of Puerto Rico was being debated, public health director Myron Wegman proposed formally training practicante.

At present these men are looked down upon because of the inferior nature of their work. We must, however, recognize the actualities of the situation. They carry and will continue to carry a large part of the burden of medical care of the people. They are frequently criticized for practices beyond their ability but no attempt seems to be made to supervise or instruct them. Training would serve the double purpose of making them effective within their legitimate sphere of activity as well as making clear the danger of doing things for which they have no training.

Dr. Wegman was unable to persuade policy makers, and the practicante remained without legal standing in Puerto Rico.¹²⁴ Despite the loss of legal status, some clinicians designated as practicante continued to provide health services in rural areas well into the 20th century. Arbona's survey of health services in Bayamón in 1955 lists several clinical sites primarily staffed by *practicantes*.¹⁰⁴

The term *practicante* became less clear after the 1950s, as "medical clerks," medical students or graduates who had not passed the licensing exam were referred to as *practicantes* during the 1970s and 1980s due to staffing shortages in primary care clinics. Because these clinicians were often passed off as fully licensed physicians, the designation of practicante, along with the term medical clerk, may hold a negative connotation today.

Attempts at implementation of PAs in Puerto Rico

The American Academy of Physician Assistants (AAPA) advocates for PA enabling legislation and assists PAs at the state level as they seek implementation. The first documentation of an attempt to establish PA practice in Puerto Rico appears in the AAPA *Legislative Watch*, December 8, 1989. “A letter just received from the Health Department in Puerto Rico indicates that the ‘legislature is in the process of enacting a law to establish a Board of Physician Assistants and to regulate this profession’.” The impetus was the desire by several PA students from Puerto Rico to return home to practice.¹²⁵ The attempt at legislation was unsuccessful, and the next issue of *Legislative Watch* to mention Puerto Rico was September 3, 1999, which noted that Puerto Rico Commonwealth Senator Kenneth McClintock was planning to introduce legislation to license PAs in Puerto Rico. AAPA Director of State Government Affairs, Ann Davis, noted that AAPA had spoken with Senator McClintock for several years at the National Conference of State Legislatures (NCSL) annual meeting.¹²⁶ In July 2000, Senator McClintock told AAPA at the NCSL meeting that the bill had passed the Senate “but ran out of time in the House.”¹²⁷ In November 2005, PA educators meeting in Puerto Rico met “with legislators and other leaders to advocate for enactment of a PA licensing law.”⁵ Also in 2005, AAPA, along with the AAPA caucus, PAs for Latino Health (PALH), teamed up to create the Puerto Rico Special Interest Group, with the goal of “obtaining licensure for physician assistants in Puerto Rico.”¹²⁸

The only official governmental documentation discussing the possibility of utilizing PAs in Puerto Rico occurred at a hearing before the Subcommittee on Labor-Management Relations of the Committee on Education and Labor, US House of

Representatives was held in San Juan on November 15, 1994, at the height of excitement over the proposed Clinton health plan. The question of PAs was raised in this exchange between the Subcommittee's Chair, the Hon. Pat Williams of Montana, and Guillermo Otero, MD, Director of the Region II Public Health Service Office:¹²⁹

Chairman Williams. Does the Commonwealth have physician assistants, PAs?

Dr. Otero. No . . .

Chairman Williams. I know there has been a tension, perhaps a healthy tension, but a tension between providers, including medical doctors and practitioners, PAs, as well as nurse practitioners.

But despite that tension, Doctor, let me ask you an opinion here, and let me refer to my own State of Montana. Montana is a huge State . . . We have one city with three people. That city does not have a hospital. But the people in that city . . . are worried about their health care as are citizens in Puerto Rico and everywhere else in the United States.

People who live in cities such as that . . . cannot attract a doctor. Shouldn't they be able to attract a nurse practitioner or a physician's [sic] assistant who, working under the direction of a physician, could provide badly needed medical services which otherwise those people will not receive unless they can travel to it?

So, first, with regard to Montana, doesn't it make sense to do that? And, second, doesn't it make sense to do it here in Puerto Rico?

Should the people who live in the mountains, some travel distance from the nearest family clinic or from the nearest migrant center, have a nurse practitioner or physician assistant available to them more readily than they have under the current system?

Dr. Otero. Well, in Puerto Rico, we don't have the problem of the distances. . . the second point is that Puerto Rico does not have the shortage of physicians that you might face in the case of Montana . . .

Chairman Williams. When we were at Canóvanas yesterday, Carlos pointed out to me that people that come in on the public cars have to get service early in the day because they have to return to their homes often in the mountains, and that places great strain on the providers in the facility.

You know, I wonder if skilled nursing, nurse practitioners or physician's [sic] assistants wouldn't be able with the less serious cases that are coming in to relieve that problem so that these people can get their service and still get the public transportation back home.

. . . Well, I will leave this struggle up to you. I will leave this fight here in Puerto Rico.

CHAPTER V

RESEARCH METHODS

While quantitative research seeks a large amount of information that can be aggregated and generalized, qualitative inquiry seeks in depth understanding through exploration of a small number of cases. A quantitative approach, such as a questionnaire sent to a large enough sample of physicians and health care leaders in Puerto Rico to be statistically valid, might also be useful, but as Patton says: “A questionnaire is like a photograph. A qualitative study is like a documentary film.”¹

I designed this qualitative inquiry to learn more about the barriers and potential facilitators to implementation of physician assistants in the Commonwealth of Puerto Rico. Among the questions I sought to answer were:

- What is the political and social milieu of medical practice?
- What do physicians, policy makers and health system administrators know about physician assistants, and how do they view them?
- Are PAs seen as needed or unnecessary?
- What do physician assistants who advocate for utilization of PAs in Puerto Rico see as the obstacles to passage of enabling legislation?
- How are their beliefs similar to or different from these other stakeholders?

Through a series of semi-structured interviews, I endeavored to learn from the perspectives of key informants with deep knowledge of health care in Puerto Rico.

Study Sample

Subjects were practicing physicians, medical educators, members of the legislative and executive branches of government, health system executives, and physician assistants with knowledge of Puerto Rico. I chose what Patton terms “purposeful sampling” of key informants with in-depth knowledge of both medical practice and the health care system of the island to achieve maximum variation in identifying cross-cutting themes. Patton defines purposeful sampling as cases selected for study:

. . . because they are ‘information rich’ and illuminative, that is, they offer useful manifestations of the phenomenon of interest; sampling, then is aimed at insight about the phenomenon, not empirical generalization from a sample to a population.¹

Heterogeneity of the sample was intended through representation of all four Puerto Rico medical schools, primary care physicians and medical and surgical subspecialists, international medical graduates and those trained in the United States, physicians and physician assistants, proponents and antagonists, government agencies and private entities. Subjects were from the greater San Juan metropolitan area and its suburbs, rural and metropolitan mountain regions, and Ponce on the southern coast.

Descriptions of interview subjects is deliberately general, to minimize possible identification of individual interviewees. The medical and policy communities in Puerto Rico are relatively small and interconnected, and my consent process pledged to maintain confidentiality to the greatest extent possible. The health care system is politically charged in Puerto Rico, even more so given recent events such as indictments of officials at the medical licensing board, and indictment of the governor on charges of campaign

finance violations. For these reasons, descriptions of subjects are intentionally vague and non-specific.

Subject identification and recruitment

I identified interview subjects through publicly available sources, the majority through web sites of professional associations, government agencies and the four medical schools in Puerto Rico. Additional sources were telephone listings and lobby marquees of public and private entities. I set a target goal of 25 interviews at the suggestion of my dissertation committee. This number would likely exhaust the range of unique viewpoints and provide a chance to explore minor differences in interpretation among respondents.

I contacted potential subjects by telephone, e-mail or fax using a standardized script in English or Spanish. All study materials in Spanish, including recruitment scripts, interview questions and informed consent documents, were forward- and back-translated by separate certified translators with Global Translation Systems of Chapel Hill, North Carolina. All study materials were approved by two Institutional Review Boards: Duke University Medical Center and the University of North Carolina at Chapel Hill Nursing and Public Health IRB. See Appendices for all materials approved by the IRB; telephone and e-mail scripts may be found in Appendices A1 and A2.

More than 75 contacts were made to achieve 25 interviews. Multiple contacts were required for most of the subjects who agreed to be interviewed. I was in Puerto Rico to do the fieldwork from January 21 to February 1, 2008. Better response was achieved once I was located on the island (and indicated so in my message) than when I had called, e-mailed or faxed the message from the mainland US. In a few cases, I followed up an

initial telephone or e-mail contact in person at the clinic or office, using the telephone script verbatim when speaking to the receptionist. Diversity was achieved through the variety of subjects: primary care and subspecialty physicians, health executives, foreign and US medical graduates, non-physician medical educators, both houses of the legislature and the executive branch of Puerto Rico's government, and physician assistants with knowledge of Puerto Rico.

My initial instinct was to use the so-called "snowball technique," where interview subjects are asked to introduce or refer the researcher to colleagues or acquaintances with expertise in the area being studied. I had initially included this approach in my dissertation proposal. However, the snowball technique is regarded negatively by the University of North Carolina Nursing and Public Health IRB, and my committee required me to amend my proposal to remove it from my study design.

While recruitment of experts via "cold" contacts was initially daunting, and certainly more labor intensive than a snowball approach would have been, the wisdom of avoiding it became clear through the process. Snowball recruitment carries issues of coercion, for example, if someone in a supervisory role asks a subordinate to participate in an interview. Further, it undermines the confidentiality of subjects, as they can be identified through the chain of referrals. I did, however, accept a referral to another individual by my initial public contact, if they identified someone in their inner circle as more appropriate because of knowledge or availability. This only occurred in two or three cases.

Interview process

Semi-structured interviews were conducted in English or Spanish based on the subject's preference. I used a standardized, open-ended interview approach, described by Patton as "a set of questions carefully worded and arranged with the intention of taking each respondent through the same sequence and asking each respondent the same questions with essentially the same words. Flexibility in probing is more or less limited, depending on the nature of the interview . . . the standardized open-ended interview is used when it is important to minimize variation in the questions posed to interviewees."¹ My initial questions utilized a fully structured instrument with extemporaneous follow-up probes.

A standardized instrument was needed to conform to requirements of both the Duke and UNC Institutional Review Boards, in order for the IRBs to approve the research. It was also necessary to reduce variation in interviews conducted in two languages. Standardization also enhances the ability to adhere to time constraints. Interviews were 30 minutes in length, a commitment I made to subjects on recruitment and to which I assiduously adhered. Subjects were key informants with crowded calendars, and I did my best to be respectful of their time. However, two or three subjects wished to continue the interview past 30 minutes, and I honored their wishes.

At the appointed time for the interview, I arrived at the agreed location (usually the subject's office or clinic) and introduced myself. I asked each subject which language they preferred for the interview and began the informed consent process using the informed consent document in the selected language, English or Spanish. The informed consent documents were pre-approved by the Duke and UNC IRBs. The subject's

questions about the study were answered; their signature was obtained, I signed as a witness, and gave them a copy of the consent. See Appendices B1 and B2 for copies of the informed consent documents in both languages; information sheets for telephone interview with waiver of consent may be found in Appendices C1 and C2.

Nearly all interviews were in person in Puerto Rico, in an office or clinic setting. All but one were individual interviews; two subjects elected to be interviewed together as they were members of the same organizational unit. One subject wished to be interviewed in a restaurant. Two interviews were conducted by telephone from the mainland. In these cases an information sheet, identical to the informed consent form but without the signature lines, was sent electronically to the subject prior to the telephone interview, and their assent obtained before beginning the interview.

Once consent was obtained, I asked subjects to verbally confirm their agreement to be voice recorded. All but two interviews were digitally recorded. The interview conducted in a restaurant was not recorded due to ambient background noise, and one telephone interview was not recorded because I had not made the contact for an official interview. I had initially called this respondent for background, but decided to sequester the interview with other findings to assure confidentiality of the informant when the subject shared candid impressions of the health care system. I took notes during both recorded and non-recorded interviews. One subject asked me to turn off the audio recorder at a particularly sensitive point in the interview, and then allowed me to turn it on again after the subjects which were politically difficult had been discussed; the subject authorized me to take notes during the portion of the interview that was not recorded.

One subject asked me to fax the questions before agreeing to schedule the interview, and agreed to be interviewed after reviewing the questions.

I used SpeechExec© Dictate, recording equipment manufactured by Philips. The recording instrument is a small, hand-held recorder with excellent recording capability. Initially, I worried about the reliability of the equipment and used an additional, back-up hand-held digital recorder, but I quickly abandoned that when the reliability of SpeechExec© was demonstrated.

During the interviews, I took personal shorthand notes that included remarks about body language, hesitation, pauses, coughs, throat clearing and facial expressions on the part of subjects. My coursework in cultural anthropology instilled in me a belief in the importance of every aspect of communication, not just what is said. As Van Maanen observes, “A wink, a blink, or nod is not merely a fleck of behavior to be described without ambiguity but is rather a potential sign that must be read as to what is signified.”¹³⁰ I also made real-time notes of my own reactions, as well as notes of emerging themes and connections, during the interviews and immediately afterward.

I edited my questions as each interview progressed, deleting questions if they had already been answered by the subject in response to previous questions. This was essential to adhering to the 30 minute interview commitment. Although I did not use a grounded theory approach, as described by Glaser and Strauss,¹³¹ where the interview questions are changed as a theory evolves through the acquisition of information from informants (I could not have done this within the strictures of my IRB approvals), I did adapt my follow-up probes to questions based on what I was learning through previous interviews. In all the interviews, I sought to maintain an open-ended approach, avoiding

narrow or simplistic questions that can be easily answered yes, no or with a short phrase. Follow-up probes included open-ended questions such as “What do you think about that?” This often resulted in rich, sometimes surprising discourse. I paid close attention to verbal cues and phrases, such as “this is only my opinion, but—”

Interview questions

Standardized interview questions were approved by the Duke and UNC Institutional Review Boards, including forward- and back-translations by separate certified translators, Global Translation Systems, Chapel Hill, North Carolina, and may be found in Appendices D1 and D2.

Transcription

I uploaded the digitally recorded interviews to a password-protected laptop computer, and saved the files on both the laptop local drive and the Duke University Medical Center network to insure against loss. I transcribed all interview recordings using the SpeechExec© Transcribe software and hardware manufactured by Philips. Total recorded interview time was more than 13 hours.

I transcribed the interviews verbatim in the language of the interview, either English or Spanish and included notes I had entered during each of the interviews about pauses, coughs, body language, facial expressions or impressions.

Authentication: Spanish

I am fluent in Spanish, but have never formally studied the language. I am fluent in Portuguese, and have lived and worked in Brazil as well as studied the language; I have also studied and achieved fluency in French, though I do not retain spoken fluency. I have used Spanish in the medical setting for more than two decades as a practicing

physician assistant treating many patients who speak only Spanish. Most of my Spanish-speaking patients are from Mexico or Central America, and there are important, if subtle differences between the Spanish I am accustomed to speaking and the Spanish spoken in Puerto Rico. All of my interviewees were highly educated individuals who spoke clearly, with little use of slang.

Minor variations in usage, however, can introduce misunderstanding, for example, the word *ahora*, now—in Mexico, the diminutive form *ahorita* means “right now.” In Puerto Rico, it means “later.” The term *generalista*, if taken at face value, means a general practice physician, a term common in English and considered in casual usage to be interchangeable with family practice or other primary care physicians. Probing further, I learned that the term *generalista* in Puerto Rico refers to an international medical graduate, often regarded as substandard. An example of bilingual or cross-language confusion was the use of the term “project” by subjects interviewed in English. At first I assumed they meant my dissertation project. I later realized that the term for a legislative bill is *proyecto de ley*, a project of law—the intended meaning was a legislative act prior to passage as a law.

To assure accuracy of my Spanish transcriptions, I enlisted the assistance of one of my dissertation committee members, Otilio Ramos, Jr., PA-C. Mr. Ramos was approved by both IRBs as a study staff member, in order to authorize him to listen to the confidential recordings. About one fourth of the interviews were conducted in Spanish. As noted, all interviews were transcribed verbatim. Mr. Ramos and I listened together to nearly three hours of digital recordings, and while he confirmed the majority of my transcriptions he identified significant subtleties I had missed in a few instances. An

example: A medical subspecialist, when asked in a follow up probe if he thought PAs were needed in Puerto Rico, replied: “*Yo creo que en la súper-especialidad ya está pidiendo a grito.*” I had understood the first part of the phrase, “I think in the subspecialties they are already asking for them.” However, I had not heard *a grito*, screaming. The phrase was actually, “I think in the subspecialties they are already screaming for them.”

Ethics

This study was approved by the Duke University Medical Center Institutional Review Board; this was required as I am a member of the DUMC faculty. Full submission to the UNC IRB was also required and approved. Both IRBs granted expedited review.

Funding

This study was funded in part by a grant from the Josiah Charles Trent Memorial Foundation, Inc., which provides modest grants to Duke faculty and staff for difficult to fund projects. Additional funding was provided through the Breitman-Dorn Endowed Research Fellowship, awarded by the Physician Assistant Foundation. Funding was used to cover the cost of professional translation services and defray travel expenses.

Notes about the investigator

The primary determinant of the success of this, or any other study based completely on interview data, is the quality of the interviews. I was introduced to qualitative research methods, including interviewing techniques, through my coursework in the doctoral program. In addition, I participated in additional short seminars in qualitative methods at the Odum Institute, UNC - Chapel Hill. A highlight of these was a

two-day session on grounded theory led by Kathy Charmaz, PhD, a noted qualitative methods expert. I had some prior experience assisting with focus groups during my tenure with the leadership team at the Durham County, North Carolina, Health Department, as we sought to learn how to improve our services to the community in the mid 1990s.

I have more than two decades of experience as a clinician, interviewing patients about personal and sensitive subjects. I have worked in family medicine, obstetrics and gynecology, and in the sexually transmitted disease clinic of the Durham County Health Department. Over the years I have honed my skills at non-directive interviewing, and the stance referred to as “empathic neutrality,” described by Patton as “a middle ground between becoming too involved, which can cloud judgment, and remaining too distant, which can reduce understanding”¹ is both familiar and comfortable to me.

With respect to cross-cultural experiences, I have worked in a migrant and community health center in Colorado, and have conducted medical interviews in Spanish for more than two decades. I served as medical liaison for Westinghouse Health Systems in Brazil for two years. In 2007, I led a faculty development seminar for medical educators in Mozambique. In my medical practice at the Duke Family Medicine Center, I provide health care for many patients from Mexico and Central America who speak only Spanish. For me, the strength of my relationships with Spanish speaking patients comes from cultural humility, which requires acknowledging that one can never attain “cultural competence,” but rather must constantly strive for sensitivity and awareness. Certainly, I have made my share of cultural faux pas over the years, but I have tried to learn from them.

I pursued briefly a doctorate in sociology at Duke University, and took several courses before abandoning the effort. I desisted because of the logistical challenges of attending classes while working more than full time, but also because I wished to do qualitative research, and faculty at the time were overwhelmingly devoted to quantitative inquiry. However, a class I completed on analysis of discourse in the cultural anthropology department provided valuable tools and experience for this dissertation. My study of sociology gave me a new perspective, and helped me to develop what Mills called “sociological imagination . . . persons with sociological imaginations self-consciously make their own experience part of their research.”¹³²

My experiences lobbying the Texas legislature for enabling legislation for PAs from 1989 to 1993 deeply informed my approach to this project. First and most obvious, I am an advocate for PAs and must maintain awareness of my potential biases; my ability to be even-handed with this subject could be questioned. Ironically, lobbying has helped me learn to be less parochial and more open-minded. I developed warm friendships with people on the opposite side of the issue I held dear, and learned from them as they articulated that opposition. As a lobbyist I was constantly challenged: “Who opposes it?” “Why should I believe this isn’t just an effort to restrict entry and raise salaries?” “What do the doctors think?” “What do the nurses think?”

When outcomes were seemingly disastrous, such as losing the vote to be included in the reauthorization of the medical practice act in 1993, I learned to move quickly from “this is a disaster” to “this is a disaster—how can we use it to further our goals?” I later learned this was Janusian thinking, the ability to hold both positive and negative concepts in the mind at the same time. Rothenberg devised the concept in 1971, named after the

Roman god Janus with two heads, facing to the future and the past at the same time.¹³³

The lobbying experience also helped me develop my “political imagination,” a corollary to sociological imagination.¹³²

From lobbying I also learned to develop a “game face.” I discovered I “show my heart on my sleeve” and have to work at maintaining a calm, neutral demeanor when annoyed or disappointed. Even after many years of practicing my “game face”, it could still be challenging to maintain an unruffled mien when subjects (usually unwittingly) denigrated PAs or articulated misconceptions, such as observing that PAs can take the patient’s history, but cannot do physical examinations, much less prescribe medication.

As I applied these interaction skills to my research in Puerto Rico, I was aware that the subjects’ experience of being interviewed by me would potentially affect their attitudes about PAs, and worked hard to come across as professional, empathically neutral, open minded and fair.

Before returning to college to become a physician assistant, I worked as a medical transcriptionist. The skills I learned then served me well, as I am comfortable with the use of transcription equipment, and accustomed to having to strain to hear recorded speech, nor do I mind having to go back over a segment several times to get it right. Transcribing all the interviews myself was an integral part of the research process.

Analysis

Analysis was ongoing throughout the project, from initially thinking about the design and interview questions (as Stephen Covey says, “begin with the end in mind”¹³⁴) to conducting the interviews personally, to writing informal memos during the weeks of

active research, to transcribing, and finally, reviewing and coding themes from the interviews.

During the interviews, I made notes about verbal and non-verbal cues, as well as my own reactions or hunches. Often these were one word entries such as “wary,” “hurried,” “thoughtful.” Some were phrases, such as “not happy about talking with me.” I jotted down my thoughts about emerging themes and concepts. Theoretical saturation, described by Glaser and Strauss as observing phenomena seen before,¹³⁵ occurred surprisingly quickly with some themes, such as the role of *generalistas* and elite physician flight from the island. By the sixth interview I was hearing recurring statements about these and other issues. This allowed me to quickly note the prevalence of those themes in subsequent interviews, and adjust my follow-up probe questions accordingly.

I began transcribing interviews while in Puerto Rico, and while I did not think of thematic categories in specific terms in the beginning, it became clear that my subjects polarized into two groups. In one group were avid supporters of PAs—these were often physicians who felt the need for PAs was acute. I later began to call them proponents. In the second group were subjects who were unalterably opposed to PAs, later I refer to them as antagonists. Both groups, however, repeated certain themes, sometimes with common interpretations, and sometimes with differing explanations for the same concept. For example, the geography of the island was seen by proponents as limiting access to care because of poor public transportation, while antagonists observed that the island was small enough that geographic access was not an issue. This system of classification was largely a thought process, with some memo documents, but drawn mostly from informal handwritten memos (I did not write prolific memos in the manner of grounded theory).

My interaction with the interview transcripts was repeated and continuous. As I transcribed interviews, I reviewed my handwritten notes. After completing each transcription, I printed it, reviewed and edited the hard copy, corrected errors and entered those corrections into the document. I gave each subject an alphanumeric identifier using a standardized code beginning with the year, month and day.

Interviews conducted in Spanish were subjected to additional analysis through the process of listening to them and verifying their accuracy with committee member Otilio Ramos, Jr., PA-C. As we listened we discussed the implications and subtleties of meaning, reinforcing and amplifying my prior analysis of all the interviews. Mr. Ramos also reviewed all transcripts of interviews conducted in English.

After all interview transcriptions were complete and edited, I entered them into Atlas.ti, a software application for qualitative research which enables the user to analyze large bodies of textual data.¹³⁶ Using my notes and lists of themes, I selected quotes from the interviews for each categorical theme. I subcategorized these as positive or negative when appropriate, for example, “access:geography:adequate” and “access:geography:barrier.”

These themes were then categorized as cross-cutting, proponent or antagonist, repeatedly reviewed, and although some were collapsed into another category, the ultimate codes were very similar to the initial categories I created. I attribute this to my personal involvement with the interviews, as I had conducted and transcribed them.

Development of implementation recommendations flowed naturally from the themes identified. What emerged was quite different from my expectation prior to conducting the research. Before conducting the interviews in Puerto Rico, I envisioned a

proposal to assist with access to primary care across the island. Informed by what I learned in the interviews, I recommend a limited pilot project in the medical and surgical subspecialties, and subsequent primary care pilots in three circumscribed geographic areas.

Quality and credibility of the inquiry

The quality and credibility of qualitative inquiry has been the subject of controversy. Polarized positions define two research camps: that of positivism, discovery through observation and measurement (quantitative research), and constructivism, development of understanding through experience (qualitative inquiry). The traditional view of science focuses on quantitative research, based on numerically quantifiable experiment and observation. Criteria used for evaluating the quality of quantitative research include objectivity, validity and generalizability.

Over the last three decades, qualitative research criteria have emerged through the work of Guba and Lincoln,¹³⁷ Patton,¹ Huberman and Miles,¹³⁸ and others. I will utilize the social construction and constructivist criteria delineated by Patton,¹ with an additional criterion, transparency, as discussed by Meyrick.¹³⁹ I discuss my study with respect to the following constructivist criteria, delineated by Patton and others, based on the work of Glesne, Lincoln and Guba, and Meyrick:

- Credibility
- Transferability
- Trustworthiness
- Authenticity
- Transparency

Credibility

Patton lists three inquiry elements to evaluate the credibility of qualitative studies: rigorous methods, the credibility of the researcher, and a philosophical belief in the value of qualitative inquiry.¹

Rigor includes data collection procedures, adequate time in the field, framing within the characteristics of qualitative design, use of a recognized approach, a single focus, and detailed description of methods.¹⁴⁰ My data collection included two weeks in Puerto Rico devoted to semi-structured interviews. A standardized set of interview questions was used, with questions in Spanish translated and back-translated by separate professional translators to assure accuracy. The thirteen hours of digital audio interview recordings took more than four times that to transcribe, with multiple episodes of listening and editing to assure fidelity to the spoken words. My determination to be as accurate as possible, combined with the foot pedal used to drive the recording while transcribing, resulted in an ankle tendonitis that took months to resolve.

Triangulation is an attempt to limit the bias of one researcher or method by using multiple data collection methods or data sources. My data collection method was standardized and I was the only interviewer. However, I sought representation from many perspectives within the 25 interview subjects: all four medical schools, primary care and medical and surgical subspecialist physicians, board-certified US-trained physicians and international medical graduate *generalistas*, physicians and PAs, medical educators and administrators, and the legislative and executive branches of government. The use of both English and Spanish in interviews is another type of triangulation. Geographic representation included San Juan and its suburbs, rural and metropolitan mountain areas,

and Ponce on the southern coast. To achieve as broad a sample as possible, I logged 1,100 miles on my rental car.

The fundamental qualitative design used with this study was a standardized open-ended interview approach with follow-up probe questions that evolved based on what was being learned through the interviews. I deleted questions if a subject spontaneously answered a question while responding to another. The questions were otherwise asked in all interviews in exactly the same words and sequence as written and approved by the IRBs.

The single focus of this study was “what are the barriers to, and potential facilitators of enabling legislation for physician assistants in Puerto Rico?” Research methods are described in detail in this chapter.

The traditional positivist criterion of objectivity cannot be argued for most qualitative studies, Patton observes, “. . . because the researcher is the instrument of both data collection and data interpretation and because a qualitative strategy includes having personal contact with and getting close to the people and situation under study.”¹ Therefore, credibility of the researcher is crucial to the quality of this study. I have attempted to acknowledge my subjectivity, and have argued for the quality of my observations based on education and experience. Patton describes Scriven’s argument that being factual is more important than being distant: “distance does not guarantee objectivity, it merely guarantees distance.”¹ I have made a special effort to be as reflexive as possible about my methods and motivations while doing the research, while transcribing the interviews, while analyzing and coding the data, and while writing this dissertation.

I do claim a philosophical belief in the value of qualitative inquiry. The richness and depth of learning that are possible with qualitative methods are deeply compelling to me. I live in the positivist medical world, as a member of the faculty of Duke University Medical Center, where qualitative research is often poorly understood and unappreciated. Yet I see a good deal of quantitative research that might have been improved by an initial qualitative exploration.

Transferability

Transferability was proposed as a substitute for generalizability by Lincoln and Guba.¹⁴¹ Because qualitative inquiry seeks deep understanding about a single phenomenon, which is very different from quantitative experiments seeking findings from a multiplicity of data, qualitative research cannot strive for generalizability. Qualitative studies can, however, be applied to contexts which are similar. This project looks at acceptance of physician assistants in Puerto Rico, which is a territory similar to the rest of Latin America, although different due to its status as a part of the US. The findings of this study may be transferable to other areas of Latin America and the Caribbean if diffusion of the PA innovation is attempted. In the US, physician assistants have been granted a share of the jurisdiction of physicians, the dominant medical profession. What is learned about PAs may be transferable, for example, to dental hygienists who wish to perform some of the functions of dentists.

Trustworthiness

Trustworthiness is an aspect of intellectual rigor. Although objectivity cannot be fully achieved, I do my best to fully describe my methods so they may be evaluated. Patton suggests applying the journalistic construct of fairness, rather than objectivity to

qualitative research. Its features are: seeking multiple realities or truths, advocating for each perspective, attempting to look for one's own biases, and aiming for balance rather than "enduring truth."¹ I have sought to represent the multiple realities voiced to me through my interviews with a heterogeneous group of subjects. I was particularly interested in the antagonist view, but had to put forth extra effort to hear from antagonists because they were less likely to agree to be interviewed. In my results and discussion I attempt to present a clear argument on behalf of the antagonists as to why PAs are not needed in Puerto Rico. I present the case of those who believe the Puerto Rico health care system is (or was) a shining example emulated by the world, and also the case for those who believe regionalized health care for all was misguided and expensive. In summary, I have done my best to write a balanced report of the proponent, antagonist and cross-cutting themes that emerged from the research.

Authenticity

This criterion concerns "the responsibility to communicate authentically the perspectives of those we encounter during our inquiry,"¹ and is achieved through thick description, extensive use of quotes and vivid depiction of context. My ability to describe context is limited by the confidentiality promised my subjects, but I have made every effort to depict words and ideas accurately, from capturing voices well with my digital recorder, conscientiously transcribing the interviews, and enlisting the help of a colleague with expertise in Spanish and first-hand knowledge of Puerto Rico and its culture to assure the accuracy of interviews conducted in Spanish. I believe authenticity was improved by the overlapping nature of analysis, both in the field and in data analysis, and

that I struck a balance between evaluating as I went along (somewhat like grounded theory) and formal analysis after the interviews were complete.

Transparency

Underpinning this chapter is the concept of transparency, which Meyrick asserts is fundamental to providing a means to judge the quality of qualitative research.¹³⁹ In concordance with her framework, I have described clearly my theoretical stance toward the research, my methods, sampling, data collection and analysis. My aim was to make this chapter accessible to readers unfamiliar with qualitative research methods by avoiding jargon and providing definitions of terms and explanations of concepts. While I have utilized established paradigms of qualitative inquiry methods and will use these methods to frame the analysis, as Patton observes, in the end “the task is to do one’s best to make sense of things.”¹

CHAPTER VI

RESULTS

Puerto Rico is the only large jurisdiction of the United States that does not authorize physician assistant practice. There have been attempts over the last decade to achieve enabling legislation for physician assistants, but these have not been successful. To date, PA advocates have not yet explored the perceptions of thought leaders in Puerto Rico to learn the reasons for the failure of these efforts and devise strategies that might lead to success. The purpose of this study was to learn more about Puerto Rico's health care system and the organization of medical practice, where PAs might fit in that structure, and the potential barriers or facilitators for implementing PAs on the island.

To accomplish these goals, I conducted 25 semi-structured interviews with practicing physicians, medical educators, members of the legislative and executive branches of government, health system executives, and physician assistants with knowledge of Puerto Rico. All but three interviews were conducted in person in Puerto Rico between January 21 and February 1, 2008. One interview was conducted by telephone in Puerto Rico, and two more telephone interviews were conducted from the US mainland during the first week of February. Interviews were conducted in English or Spanish, based on the subject's preference. The interviews averaged 30 minutes, with one taking 20 minutes and two requiring over 45 minutes to complete. All but two interviews were digitally recorded and transcribed. For those interviews not recorded, I used extensive notes. I analyzed the interviews by grouping ideas expressed by the

respondents into recurring categories and assigning thematic codes using Atlas.ti, a qualitative research software application. These codes were then organized into overarching themes.

The interview questions focused on these areas:

- Knowledge about PAs and their role in health care
- Attitudes toward PAs
- Beliefs about access to care in Puerto Rico
- Beliefs about the adequacy of physician supply in Puerto Rico
- The structure of organized medicine in Puerto Rico
- Barriers to PA implementation
- Strategies for PA implementation

Interview questions in English and Spanish may be found in Appendices D1 and D2.

In this chapter I present what my interview subjects told me about the health care system of Puerto Rico and their differing perspectives as to whether physician assistants should be implemented on the island. I first explore what subjects said about the health system, its history and current challenges. I then analyze subjects' responses to the question areas listed above.

Subjects' responses delineated two opposing major perspectives: those who believed PAs were not needed, some of whom would actively oppose their implementation; and those who felt PAs were needed. These two views were largely consistent with opposing beliefs about access to care on the island: those who opposed PAs argued that access to health care is sufficient, and those who felt PAs were needed

argued that access was lacking. The central place of access was key to the perceptions of the need for PAs but was also a contested concept. A critical question and a transcendent theme that emerged was stated in the following words by several subjects: “It depends on how you define access.” This theme will be discussed in detail later in this chapter.

The second overarching theme concerned the social-political organization of medicine into well defined hierarchies of prestige and power. Within that hierarchy, there are skirmishes for control of organized medicine, and divisions based on discipline and where the physician was educated. Because of these divisions, physicians are disorganized and unable to advocate for changes in the health care system. Several subjects mentioned potential opposition from nursing. Subjects discussed potential problems with patient acceptance of PAs, citing a distrust of non-physicians such as nurses, and reflecting a cultural belief in the superiority of specialty care over primary care that was expressed in ways that supported the argument that patients would not place their trust in PAs.

A third overarching theme is the pervasiveness of politics. This is evidenced by polarization among the political parties and within them and is set against a background of highly publicized allegations of scandal in medical regulation and the governor’s office.

Finally, I organized responses that captured both proponents’ and antagonists’ understanding of the role of PAs and catalogued the strategies subjects suggested for implementation of PAs on the island.

Subjects are identified by year, day, and month (for example, 08-22-01) in the transcribed interviews. To further identify subjects, following the date I used two to three

letters referring to category of respondent, whether physician or member of a branch of government, for example, and numbers indicating the member of each discipline in order of chronological interview. Interviews are stored electronically by respondent on my password protected network at Duke University Medical Center. A member of my dissertation committee, Otilio Ramos, PA-C, assisted me with interviews conducted in Spanish by listening to each digital audio recording in its entirety, which we edited after discussion for accuracy and linguistic nuance. Mr. Ramos also reviewed all the complete interview transcripts in English.

I organized subjects' responses within the interviews using Atlas.ti, by identifying recurring trigger words and pulling out the corresponding passages of discourse. For example, one trigger word category referred to physician specialists such as neurosurgeons and orthopedic physicians. Trigger words in this category included *specialties*, *specialists*, *subspecialists*, and in Spanish, *especialidades* and *especialistas*. Because all respondents discussing physician specialists argued that their numbers are inadequate in Puerto Rico, creating problems with access to care, I assigned the code *physician supply and specialists: negative*. Most passages had more than one code assigned. Two examples: *physician supply and specialists: negative* and *waiting for care*, and *physician supply and specialists: negative* and *doctors leaving Puerto Rico*.

Appendix E is the output of all codes from Atlas.ti. Appendix F provides several examples of codes and the trigger words associated with them. Several sample pages of code output from Atlas.ti (filtered by "all", in other words, all coded passages) with the passages of discourse organized by code, are provided in Appendix G.

I did not include subjects' unique codes in the text as that might allow them to be identified. In the sample code and discourse output provided in Appendix G I have removed the anonymized identifiers beyond date in order to preclude any possibility of identification, therefore the date is followed by XXX in each case.

Subjects' responses are entered in this document as single space indented quotes. Each single spaced quotation paragraph represents a different interview respondent, within each section demarcated by double spaced commentary.

Puerto Rico's health care system

Limited information on the history and organization of Puerto Rico's health care system is available in the medical and health services literature. My quest took me beyond medical database searches to dissertation abstracts, the Pan American Health Organization and the New York Academy of Medicine library. However, it was during the interview process with subjects in Puerto Rico that I began to learn more deeply about its unique history and accomplishments.

The Puerto Rico health care system is based on that of Spain, and predicated on access to health care for all citizens. It is not based on the US health care system, which ties health insurance to employment and has yet to implement universal coverage. *La Reforma*, for all its shortcomings, is evidence of the social value Puerto Rico places on health care coverage for all.

When the first interview subject mentioned "the Arbona system" in passing, I made a note to look up the word "arbona" later—the subject was in the middle of a long discourse about how frustrating it is to work in the current practice environment, and I did not want to interrupt. In a subsequent interview I learned this referred to Guillermo

Arbona, who was a primary care physician and the architect of regionalization of health care in Puerto Rico in the 1950s and 1960s. The regionalization of health care in Puerto Rico was a major policy change and one that was promoted by American foundations. It essentially “planned” the Puerto Rico health system along rational lines. While the regionalization process was not a theme that helped explain the PA issue, it is an important background element to all of Puerto Rico health policy. One subject explained regionalization in this way:

And basically what [Arbona] does is put together a system to look like a pyramid. On the base you had each primary care center, for each island municipality, and as that pyramid goes upward it starts to close in, because you would have your secondary level with one hospital for every area. And then several areas would be served by a regional hospital which would provide tertiary care. And you know, this was the 50s.

The reality of regionalization is important to an island that is expansive enough to create geographic barriers to care. Another subject remembers accessing health care in his rural community as a child:

You know I came from a rural area, a small town [names town]. I remember there was some kind of nurses, and they are in the towns, in the small cities, but in the rural areas they have these small, “public health units” and they have nurses that are in charge of the shots, and they sutured, and I remember the last name of the one who worked there, its was Mrs. [gives name] [laughing] . . . She also gave all the injections to the whole population from that very far away rural area, poor area, and she was like the family physician. And it was in the 60s.

Facilities were described as basic but functional:

. . . you would have little clinics in the towns. These medical facilities belonged to the government. People would go there, sometimes there wasn’t a doctor there, but there was a nurse and an ambulance. And some people said they didn’t have band aids, but that was just people talking, something could be done. Now they don’t even have that, and we have problems.

Subjects spoke of the Arbona system with pride. Nostalgia was something that recurred in the way people expressed their remembrance of the regionalized system:

Any place you go around the world, especially in Latin America, and some places in Eastern Europe, people will ask you what happened with the Arbona system, why did you destroy it? There's a lot of local ignorance and international recognition.

Yeah, we had a kind of a socialist health care system; everyone had health care in Puerto Rico 20 years ago. It was good, it had its problems, but people had hospitals, they had . . . and they sold everything. And they moved to the health care insurance model. So it's a little sad for us that we work here and we see everything that we had and now we're trying to just deal with the insurance companies. But! We can't go back.

Many subjects commented negatively about the move to managed care spearheaded by Governor Pedro Rosselló in 1993, known as *La Reforma*. This is also a major policy element that colors much of the discussion of health politics. This change in reimbursement was aimed at controlling spiraling health care costs by shifting to a fully capitated system with risk assigned to the primary care physician. This system redesign included privatization of facilities, which ultimately had a negative impact on access to care:

We have a medical system that was broken down by the so-called Reforma de Salud. We had a system that was the model for Latin America and many parts of the world. Each town had a community health center and even though those general practitioners provided that care, there was incorporation of public health activities in those centers, preventive, provide immunizations and everything like that. Then there were secondary hospitals that functioned as a smaller hospital does, with specialties like internal medicine, surgery, OBGyn and pediatrics. And then there was a tertiary hospital that was the [Medical Center] for more complicated cases and surgical specialties. But there was Reforma de Salud and they just sold and closed those community health centers.

This is an issue of access. In addition to that, most of the population has what we name the *tarjeta de salud* [health card], it's like a managed care organization in the states, and there are some private hospitals that don't take this insurance.

I believe it was in the late 80s, somewhere around there, there were still a series of publicly funded health facilities across the island, what they called public hospitals. And those have gone away. And so the accessibility of health care has changed because of that.

La Reforma also affected patient access to specialists:

We had a regional system, where access to primary care was a bit limited, but there was very reasonable access to the general surgeon, etc. We changed to a system where we supposedly have much access to primary care, and it has affected secondary and subspecialist access.

Another effect of privatizing the hospitals was a reduction in the number of residency positions for graduates of Puerto Rico's four medical schools. In this instance policy is shown to have perverse effects that ultimately reduce access. Access is the key element:

You know what happened in Puerto Rico? . . . the last decade, the same ex-governor . . . sold practically all the hospitals in Puerto Rico to private administration and then we don't have places for residents.

Political polarization and anger with former Governor Rosselló, the architect of *La Reforma*, came out in several interviews, for example:

Rosselló used health care to get votes, by saying he was going to give people the *tarjetita* [little card] and put them in control of their own health care.

He raises health in Puerto Rico from not being an important issue, politically, and converted it into a political issue. So, he converts health into a political event.

One subject noted, however, that system change and privatization began long before Governor Rosselló's administration:

So for many people privatization is Rosselló and it started there, and that's not true . . . [Former Governor] Luis Ferré started it in 1969 and in 1993 Pedro Rosselló from the same party decided to culminate that. And went on to do privatization of many agencies.

These two major policy changes have to be understood to interpret the PA issue. They themselves are often interpreted in the context of access, the dominant theme of any assessment of the relative value of any policy.

“It depends on how you define access”

PA proponents and antagonists see the island’s health care system through different lenses. Those who oppose PAs argue they are not necessary, because access to health care is excellent. PA proponents, on the other hand, see the same system differently: they argue that access is greatly restricted. Several proponents, when asked to assess access to health care in Puerto Rico, laughed and said with irony, “it depends on how you define access.”

Antagonists define access by the numbers: the island’s small size and favorable numbers of physicians for the population served. Proponents cite transportation problems despite the relatively short distances to travel. In addition, proponents describe long waits to be seen in all clinics as evidence of poor access. While antagonists cite adequate numbers of physicians, proponents felt there is a severe shortage of physicians in the medical and surgical subspecialties. Both antagonists and proponents observed that physicians, particularly specialists, are leaving the island. Proponents felt this demonstrates the need for PAs; antagonists saw physician flight as indicating a need for tort reform.

Structural elements and arguments

The following matrix organizes the overarching themes into cross cutting categories (politics, health system structure) and focused categories and their

“valences”—whether positive or negative with respect to the category, proponent or antagonist.

Table 4

Thematic matrix: structural elements and arguments

Cross cutting categories	Themes			
	Politics			
	Health System Structure			
Focus categories with “Valence”	Anti-PA	Code	Pro-PA	Code
Geography	Small island, no barriers: anti, geography	AG	Barriers to care due to travel, terrain: pro, geography	PG
Physician supply	No shortage of physicians: anti, supply	AS	Inadequate number of specialists reduces access: pro, supply	PS
Waiting for care			Long waits reduce access: pro, waits	PW
Emigration	Doctors leaving, tort reform needed	AE	Doctors leaving, reduces access: pro, emigration	PE
“Below the radar”			PA-like roles being created: pro, radar	PR

- **Access: geography: adequate (AG)**
- **Access: geography: barrier (PG)**
- **Physician supply: sufficiency (AS)**
- **Physician supply and specialists: negative (PS)**
- **Access: waiting for care (PW)**
- **Doctors leaving Puerto Rico (PE), (AE)**
- **Health policy “below the radar” (PR)**

Code Access: geography: adequate (AG)

Antagonist discussion often compared Puerto Rico's geography to that of the US mainland, with its wide open spaces, and Puerto Rico's relative compactness in 3,500 square miles. While geography is just one of the many factors that determine access, antagonists saw geography as the central considered, and geography figured prominently in their comments arguing access is adequate and thus PAs are not needed:

You know something? We have a difference, the United States and Puerto Rico. The differences are that you have a big nation with small towns that are distant between, and then you need—you don't have sufficient MDs to provide services to all the people.

It doesn't matter where you are, even if you don't have a [health insurance] plan, you have the access. And . . . three quarters of Puerto Rico is mountains, and even if you live in the highest peak of the mountain, you have access to a medical doctor, so I really don't know if you open that door, if there's going to be the possibility to work here as a physician assistant.

I think the situation, I know for example when I was in [names a state], that we served in a clinic that was very distant. And there were few physicians but they had a physician assistant . . . but the case of Puerto Rico is different . . .

Basically Puerto Rico is so small that you may live in a small little town, but you get in a car and in 5 minutes you're in a big city. Distances are so small that they [PAs] wouldn't necessarily make a difference.

You have to enact a new law for this program, but I believe that the medical society here in Puerto Rico will be opposed. And the basic reason is that Puerto Rico is too small and we have medical resources in small towns. That is my point of view.

There are other aspects that may be more important in other jurisdictions, for example the distance or the concentration of population is not a real factor here because we have at least theoretically, short distances to resources to have the health care that is needed. So the geographic factor is not a real obstacle to access.

Code Access: geography: barrier (PG)

In contrast, proponents saw the island's geography very differently, asserting that access to care is problematic, due to issues with poor public transportation:

So now if you need to see somebody, it's not available in the area where they live, they basically have to travel to San Juan to get most of the health care. Now, it's a small island, it's only 100 miles by 35 miles, but when you talk about the public transportation system . . . then you understand that even though it's only at the most 100 miles far away, it's not that easy to get there.

But here in Puerto Rico you have a lot of people very far out. And people cannot buy medications; they cannot even come down to the pharmacy. So they don't have anybody to take them to the major cities, and here the major part of the island is concentrated in San Juan, Ponce, Mayagüez.

The reality is that it is very difficult to access coverage for distinct reasons. The services are not distributed in the island in the same way. It is not the same in the rural as in the urban area. Because in the rural area there are few doctors. There are few places to find services. For these reasons, access in the rural area is difficult; even though coverage exists and you have the system, you cannot get services.

Code Physician supply: sufficiency (AS)

Antagonist subjects stated that there is no shortage of physicians in Puerto Rico. They pointed out that with four medical schools graduating new doctors every year, the supply of physicians is sufficient and continually replenished by the island's medical education pipeline. If the physician supply is sufficient, the argument follows, then PAs are not needed.

Therefore, it appears to me it is not favorable for physician assistants in Puerto Rico because, in the first place, there are enough physicians.

Well, my point of view is that in Puerto Rico I think that we have enough doctors. MD doctors.

And this type of professional, well, if at this time we have more than 10,500 physicians in Puerto Rico, and some 3,000 square miles, there is a sufficient number of physicians.

We have 4 million people here. Enough physicians. Four schools of medicine.

Code Physician supply and specialists: negative (PS)

Proponents acknowledge that there is an adequate supply of generalists (although there are issues of quality), but argue that there is a crisis in access to medical and surgical subspecialists. They argue that not only is there an existing shortage of specialist physicians, it is worsening because specialists are disproportionately among those leaving the island to practice in the mainland US; this will be discussed later in this chapter (PE). Also, as many specialists are nearing retirement age, the shortage will become more acute. For proponents, many of whom trained or worked with PAs in the mainland US, the implementation of physician assistants is a viable option to improve access to specialty care and ease the workload of these physicians. This is further evidenced by specialists' creation of "PA-like" roles for other health professionals in response to the non-availability of PAs (PR), also discussed later in this chapter.

If access is getting to see the primary care physician, it may be that generally it is good. But access to other levels, access to secondary services, tertiary, then you are entering into other problems.

If you break your leg, you're going to have a little bit of difficulty finding an orthopedic. So I think that that's not good.

Well, we already know that we are short of physicians in almost every specialty, and there are specialties that we are going to have a chaos when people start retiring.

There are some specialties that have a great lack of access: general surgeons, neurosurgeons, orthopedics, this area is becoming very difficult because there aren't any.

The access to subspecialties has been reduced—every day it's less and less.

There are not enough specialists; I think that now there is a scarcity of general surgeons and orthopedics.

There are some specialties that we have a dearth of physicians right now, like orthopedics, and some of the surgical specialties like neurosurgery, even anesthesia, so that I can see that the surgical specialties would be an area certainly where physician assistants would be potentially useful at this point in Puerto Rico.

One subject noted the serious health impact of a shortage of specialist physicians, as patients with a need for immediate care have that care delayed due to a lack of specialist availability:

There's a big problem because there was a study where most of the subspecialties are behind the ideal number, and you have patients with even severe illnesses that have to wait to see a doctor, a specialist.

Access to specialty care is not just an issue for the medically indigent; it also affects persons of wealth with excellent private health insurance plans. While persons of means may not confront access problems in primary care, problems with access to specialists are a problem for all socioeconomic groups in Puerto Rico. This is also expressed in terms of the next thematic code, **waiting for care (PW)**:

Where I hear a lot of complaints as a primary care physician is in the upper end, which is when they go to the specialists. You know there are very little specialists here and they almost beg me not to send them to them. "Don't send me to the orthopedist; don't send me there because I have to wait 8 hours there, 6 hours." Absolutely, some of them refuse. "My time is just as valuable, I refuse to go."

Many proponents felt strongly that PAs are needed in the medical and surgical subspecialties. One subject, when asked in a follow up probe whether PAs are needed, replied:

I believe in the subspecialties they are already screaming for them.

What do antagonists think about the specialist physician supply? One antagonist replied to my question about access to care by initially noting that for some patients, especially those covered by *La Reforma*, access to specialists is difficult. In a later follow up question, I asked if PAs might be useful in the specialties, and the subject circled back to the sufficiency argument, adamantly stating there is no shortage of physicians and PAs are not needed—if “work conditions” are improved, this will resolve the problem (AS) (italicized emphasis is mine):

Subject: . . . there is a group of the population that still doesn’t have good access, and obviously, *La Reforma* put what is called managed care, so this also perhaps limits a bit the facility with which the patient can move, *especially to specialists, which is where there is more difficulty* . . . if we could say that there are very few physicians and many people that need them . . . this could change the atmosphere in which the physician is working, and help him, but I believe that there are sufficient physicians. That at this time it is not that there are no hospitals; it is not that there are no physicians; it is because the conditions in which the physicians work are not adequate.

JS: . . . what if you had physician assistants in specialties, to help specialists?

Subject: It is the same problem! Because I said there is no lack, first. Specialists, well, *there are sufficient specialists to work*. This, it would be solving, really nothing. I believe the situation, I know for example, that when I was in [names US state]; we served a clinic 100 miles away. But in the case of Puerto Rico, it is different, because physicians are sufficient, the problem is how to distribute them and improve the working conditions.

Code Access: waiting for care (PW)

A universal theme among proponents was the wait time in clinics, where patients routinely wait hours to be seen. It is commonly held that there is either no appointment system, or it is non-functional. Patients must arrive in the early morning—hours before the clinic opens—enter their name on a list when the staff open the doors, and sit in the waiting room until their name is called. Leaving the waiting room for even a few minutes

is risky; if a name is called and no one responds, the name is removed from the list.

Proponents argued that this is evidence of a physician shortage, despite the apparent sufficiency of supply based on the numbers. Proponents argued that this is evidence of the need for PAs, particularly in the medical and surgical specialties, where waiting for care is most pronounced.

There is a big, big complaint about the waiting time here. People expect to be seen within a half hour of their appointment, and that is not happening. If you go, you sign up in the morning at 6 AM, you get put on the list, and then you wait.

Like a person who has an urgent need to see a physician, he has to come from his home, wherever it is, out in the country, come to the office, maybe he has to be there before 6 AM, to get a number, and if by a certain time the total numbers that the physician is going to see that day are out, he will not be seen. And so even though the health care could be good, it's not accessible in the moment of need.

There's no real appointment. Everybody comes in at the same time, and it's a first come, first served basis so you get a number and people are showing up all at the same time. Your number may be 48, but it really doesn't matter. It's a whole day affair.

. . . right now patients take a day, at least, to get their care . . . you have to go to the doctor's office, you don't get an appointment time, you wait all day, you have to bring your lunch because you can't go out for lunch because if they call you that's it, you've lost your turn.

One subject asserted there are not enough physicians in Puerto Rico, and in a follow up probe I pressed further, noting that many I had interviewed felt there was no shortage of physicians. The subject replied emphatically that waiting for care is evidence of a physician shortage, and that waiting is used to ration care by limiting access:

JS: Do you believe there are enough doctors in Puerto Rico?

Subject: No.

JS: Because most [subjects] tell me there are plenty.

Subject: No. That is *false*. If that were true, why do people have to stand in line for four hours for every doctor's appointment? The other thing is that they don't give specific time appointments. Yeah. And that's, you know, horrendous . . . you have to spend half a day in order for one medical appointment. It is almost impossible, for example, for you in Puerto Rico, to in one day have all your annual tests done, and so forth. Because of scheduling problems. And if you have a scheduling problem, it's because they use the long lines as a way to ration services. If you were able to get instantaneous service, or near instantaneous service, you'd have more people using medical services and then would discover that in fact you don't have enough doctors to take care of people.

The same subject felt that the problem of access to care will get worse, and that PAs are a logical solution:

So, you know when you have as big a problem with supply and demand as you are going to have, then people are going to start looking at alternatives, and that's when the PA's day will come.

Code Doctors leaving Puerto Rico (PE)

Proponents reported an accelerating trend of physicians leaving Puerto Rico to practice in the mainland US. About half of the graduates of the four Puerto Rico medical schools have to leave the island to do their residencies, due to a shortage of residency positions on the island.

Some go to do their residency in the mainland, and don't come back. Some of them, they do their residency here and they go immediately to the states.

And you're losing specialists, we're losing a lot of people who are moving from Puerto Rico—I'm losing 50% of my graduates.

Some of them aren't *leaving*—they go to do specialty training and they never come back.

A great amount of students, after they graduate, move to the states. It can be up to 35%. In the University of Puerto Rico, 30 to 35% of graduates move to the states for residency. Most of them never come back.

We have several schools of medicine but when people go out and do their internships and residencies outside of Puerto Rico many do not return.

We had a lot of family physicians move to the United States, actually, after the health reform started in Puerto Rico.

Reasons given for physician flight included higher salaries, a high risk of lawsuits but inability to buy adequate malpractice coverage, and a desire to get away from the “hassles” of practicing in Puerto Rico.

A lot of physicians are leaving. I think they’re leaving for a lot of reasons. Some of them are economic, some are malpractice—they cannot get sufficient coverage—some of them are hassle.

In the states doctors are paid much better and health plans pay you much better than here so a lot of the physicians just move to the states, because they have huge debts or they’re searching for a better life, whatever.

Those physicians who are leaving Puerto Rico are the elite: residency trained and board certified. Board certified physicians from Puerto Rico are also in high demand in the mainland US because they are bilingual and can help health care organizations respond to shifting demographics.

Now the ones who are leaving, the most are the subspecialists and specialists. We’re having a problem in orthopedics; we’re having a problem in OBGyn, neurosurgeons, and so forth.

Some board-certified physicians are choosing to stay in Puerto Rico, although they could easily leave for the mainland US and receive higher salaries. One board-certified primary care physician spoke of how discouraging it is to stay on the island to care for the medically underserved:

They’re moving to the states. Everybody’s leaving. You know what happens when the ship is sinking. The rats leave. And we stay behind. Now, people think otherwise, they think we are the rats because we are staying—those others are leaving because they can leave.

An antagonist subject spoke of **doctors leaving Puerto Rico (AE)** in different terms. For this subject the issues are working conditions: malpractice risk and low levels of

reimbursement. The subject refers to the available malpractice coverage of \$100,000 per occurrence and \$300,000 total, which is typically considered minimal coverage in the mainland US; usual coverage is \$1 million per occurrence and \$4 million total. In this subject's construct, if malpractice and reimbursement were reformed, doctors leaving Puerto Rico would no longer be an issue, once again negating the need for PAs:

. . . the conditions here in Puerto Rico are so bad that the physicians all end up leaving . . . for the conditions, like for example, what malpractice covers is 100,000/300,000 [dollars]. A surgeon is not going to, it's very difficult to run a risk of this nature, and another thing, what the medical plans pay is so small and so bad that many are dissatisfied.

Code "Below the radar"

Proponents observed that some specialists are finding ways to utilize health professionals, such as nurses and unlicensed physicians, in subordinate roles to alleviate workload demands. Frustrated by the inability to legally employ physician assistants, these physicians are creating PA-like roles informally, or as one subject said, "below the radar":

Already in Puerto Rico I understand something like this is occurring, but below the radar as they say, you know? Beneath the law.

We have our own PA assistants, it's a modified PA assistant, and we call it [gives job title] . . . I had to make this project because we had a need for PAs and we didn't have licensed PAs here. So really, you have already a project that has shown that it's good. As part of your study, you can say, look—these people have [gives job title]. They are also using them in [names another specialty] but they are called something else . . .

Yeah, I think the big need right now is in the specialties. I went to see my urologist and he had like an assistant there, I think it was a male nurse, and I said, he's using him like a physician assistant.

Midwives . . . they work usually in the labor room of the hospital, while the OBGyn is sleeping at home, and she is the OBGyn in charge.

Here, you know, that type of assistant, at that level—I think is going to develop despite the law or not.

The social-political organization of medicine in Puerto Rico

I now turn to the social-political organization of medicine and health care in Puerto Rico to consider the need for and barriers to PA implementation. The previous section considered the transcendent theme, “it depends on how you define access.” Antagonists argue that the Puerto Rico is a small island with a large number of physicians, and assert that health care is readily accessible. Proponents look at the same island and see long waits for care, increasing physician emigration and stopgap measures utilizing other health care workers in subordinate roles as structural evidence of barriers to health care access, demonstrating the need for physician assistants. Looking beyond structure into the social and political organization of medicine reveals deeply rooted, often unstated cultural norms and expectations about what it means to be a physician in Puerto Rico, and how PAs might threaten physicians’ identity and occupational prestige, particularly for those physicians who occupy a position low in the hierarchy.

Medicine is a well respected profession in Puerto Rico that is stratified (as in the mainland US) based on prestige and income. In Puerto Rico, prestige is mediated by several factors, first, whether the physician trained in a US medical school and residency, or outside the US, second, whether the physician is board-certified or not, and third, whether the physician is in a primary care discipline, or a medical or surgical subspecialty.

A crucial finding of this study concerns the *generalistas*, physicians trained at international medical schools who take a “local board exam” in Spanish and undergo only a one year internship, usually non-accredited. *Generalistas* are widely regarded as

delivering substandard care. They earn less reimbursement from *La Reforma* than board-certified primary care physicians, and constitute the front line of primary care in Puerto Rico. The role of *generalistas* in Puerto Rico's health care system demonstrates what Van Maanen calls a "collective secret," something that is widely known but controversial.¹³⁰ *Generalistas* represent almost half of physicians in Puerto Rico, and because of their position in primary care, at the bottom rung of physician occupational prestige, subjects universally predicted they would vociferously oppose PAs. *Generalistas* dominate the Colegio de Médicos Cirujanos, a quasi-regulatory agency which is presented as a medical association, but membership in the Colegio is mandatory for every licensed physician. Colegio opposition was universally predicted.

Many subjects spoke of the inability of physicians to advocate as one voice, due to polarization of different camps based on specialty. The political struggle for control of the quasi-regulatory body, first dominated by specialists but later taken over by *generalistas*, was mentioned by several subjects. I named this situation "disorganized medicine." A few subjects mentioned the likelihood of nursing opposition to PAs. A belief that Puerto Ricans do not trust or accept non-physicians was expressed by a few subjects.

Within the overarching category of the social-political organization of health care in Puerto Rico, the following codes were assigned and will be explored:

- **Physician occupational prestige**
- **Generalistas**
- **Generalistas: opposition**
- **Colegio: opposition**

- **“Disorganized medicine”**
- **Nursing resistance**
- **Patient acceptance**

Code Physician occupational prestige

Physician occupational prestige is mediated by a number of factors, but regardless of where a physician is positioned in the hierarchy, the profession of medicine is widely admired within Puerto Rican culture. Despite the challenges they face, physicians in Puerto Rico enjoy an exalted social position. This may explain to some extent the public’s apparent tolerance of long waits to be seen in clinic, for example. Physicians in the mainland US have seen some erosion of their social position, and it might be argued they have not enjoyed prestige similar to Puerto Rico since what Freidson termed “the golden age of medicine”, the 1950s.⁶⁰ One subject asked me if I knew what “MD” stood for in Puerto Rico. I asked the subject to elucidate, and subject replied: *Médios Dioses* (demi-gods).

The stratification of the medical profession is a “collective secret,” and as such was only voiced by two subjects. While this social reality is woven through what I learned about *generalistas*, it is rarely spoken of directly. Two subjects spoke passionately and directly about the hierarchy of medicine:

For example, the specialists and the generalists, are two levels. There is distance. The graduates of the University of Puerto Rico versus the graduates of the other universities. There are distinct categories of physicians . . . it’s a hierarchy. So therefore, I graduated in the United States, I’m a big guy. I graduated in the University of Puerto Rico, I’m a big guy. I graduated in the Dominican Republic [shrugs] . . . We are all doctors, we all have licenses. I have boards, and you don’t have boards. Even if you try to set it aside, it is another level. So inside, obviously this creates friction. So the interests of the primary care doctors are distinct from the interests of the specialists.

In Puerto Rico the neurosurgeons are viewed as the demi-gods, and [names primary care discipline] are garbage. We are literally garbage. We are the bottom rung of everything. We get kicked around, abused . . . Hospitals don't want them, people don't want them, people just want to go to the cardiologist.

Physicians lowest in the prestige hierarchy are most likely to be threatened by PAs, as shown by Ferraro and Southerland.⁶⁵ Incursions by non-physicians into the practice of medicine may threaten to erode the exalted status enjoyed by physicians in Puerto Rico, especially those on the bottom rung of the ladder, the *generalistas*. This has economic aspects as well, as PAs would potentially threaten to displace *generalistas* and thus threaten their livelihoods; this is further discussed in the code **generalistas: opposition**.

Code **Generalistas**

Generalistas were prominently mentioned in interviews, though learning what the term meant required some follow up probing. While the surface meaning is “general practitioner,” further exploration revealed a deeply rooted issue about quality and politics in health care and medical practice in Puerto Rico—and a challenge to implementation of PAs.

Various characteristics of *generalistas* came out over the course of several interviews. First, *generalistas* are only required to complete a one-year internship, instead of the three year minimum required by most states:

Well, regarding the physicians in Puerto Rico, there is another situation that we must take into consideration. And it is that in Puerto Rico, which is very different from the mainland, there are a large percentage of our physicians that only have one year of postgraduate education. That is, when they finish their fourth year of medical school, they only do an internship and that's it. And with that limited postgraduate education they go into private practice and that's what they call the generalists. And of all

primary care physicians in Puerto Rico, they represent probably 45 to 50% of all the primary care physicians.

I asked another subject about the internship requirement in a follow up probe, and learned in addition that *generalistas* are not trained in the outpatient setting, though many are deployed in ambulatory care:

. . . they only do local internships for one year, and then that internship is hospital based, not ambulatory, so they do not have the training in ambulatory and preventive areas. There are lots of physicians, but we have a double standard here . . . Most educators agree that you need at least three years plus the MD degree to be able to practice independently as a physician.

Most *generalistas* complete non-accredited internships:

. . . one year. There are some accredited internships and non-accredited internships. And most of them make a non-accredited internship.

These non-accredited internships are often referred to as an *internado criollo*, “creole internship”:

So they do what we call here in Puerto Rico, an internship that is not accredited, we call “*un internado criollo*” that is not accredited.

All respondents indicated that *generalistas* were foreign medical graduates, trained in non-accredited programs in Latin America and the Caribbean:

We have a lot of generalists, and probably that would be the biggest part of doctors here, because we have a lot of doctors, again, that trained in foreign schools that are not accredited.

They usually train in foreign schools . . . Santo Domingo and Mexico are the two big ones. You might get some from Grenada, and Ross and those islands.

We have a big influx of foreign graduate physicians . . . Dominican Republic and Mexico, are the two places that most come from.

Because *generalistas* do not graduate from Liaison Committee on Medical Education (LCME) accredited medical schools, and because most do not speak English, they are

unable to take the United States Medical Licensing Examination (USMLE) series; passage of USMLE is required for entry into an accredited residency. The Puerto Rico medical board provides a “local” board exam which is administered in Spanish in lieu of USMLE; USMLE is only administered in English.

Puerto Rico has a 2-tiered medical system, which a lot of people are or are not familiar with. You have two ways of achieving a license here. One is through the USMLE process and the other one is through the local exam. And currently there must be about 4,000 physicians which are called the *generalistas*, GPs here, who got their license through a local exam . . . So you have 4,000 physicians out of the 10,000 who are fundamentally fairly restricted to practicing medicine in Puerto Rico and they get paid at a lower rate.

Right now we have four million people and 10,000 physicians, that puts one for every 400? Which is a pretty good ratio. But of those 10,000, 4,000 are GPs, they have no residency and they have no chance of getting residency because they have no USMLE exam, so they are stuck in that profession. They would have to go back and pass three USMLEs and get into a residency program.

And in Puerto Rico you can take a “local board,” if you are not eligible for the USMLE you can take the Puerto Rico board. And this gives a chance to foreign graduate physicians, if they pass the board, to practice, to get a license to practice in Puerto Rico.

All *generalistas* are not foreigners. Many *generalistas* are Puerto Ricans, American citizens who attend non-accredited medical schools in Latin America and the Caribbean because of educational or language barriers:

Some of them, really the requirements for those schools are not the standard of the schools of medicine in Puerto Rico, so it is easier for them to get into the school of medicine maybe without the college preparation that is required for a medical student here. And they also can do medicine without taking the MCAT (Medical College Admissions Test) in some of those schools.

One subject, a Puerto Rican foreign medical graduate eligible to sit for the local board, explained that the language barriers can seem insurmountable, even if academic performance is not an issue. And it begins with the MCAT:

I wanted to study medicine and I went to college, and that was just a dream—and because I was doing fairly well in school, my mother said, hey if you want I'll find the money and you can go to medical school. But the thing is, not knowing English, in Puerto Rico . . . how do you take the MCATs, if you don't know English? All these factors. So I decided, you know what? I'll just go to a Spanish speaking school. And for that I had to leave the country. So I decided to go to the Dominican Republic and applied to a couple of schools; I was accepted and I studied over there.

Despite concerns about the quality of care provided by the *generalistas*, they comprise much of the health system in Puerto Rico. Subjects indicated that *generalistas* make up the bulk of emergency and urgent care practitioners:

I don't know if you know about the system in Puerto Rico, but in each of the towns and cities, most cities around the island, each city has a small primary care center and they have a 24 hour emergency room . . . and more than 95% of these emergency rooms are run by *generalistas*.

They are doing emergency room services, and they are doing primary care in those groups that are giving the services for the health reform of Puerto Rico.

The primary care centers, in Puerto Rico, they are open 24 hours and they call these places emergency rooms. In reality they are ambulatory care clinics with extended hours. Because you have a physician with little training and scanty resources, giving care to patients.

Another role for *generalistas* is inpatient hospital medicine, called hospitalists:

Because they are not from accredited programs, they cannot go to train in other types of specialties. So we see people that stay as hospitalists because they are generalists.

The system is also dependent on *generalistas* because they are reimbursed at much lower rates than board-certified primary care physicians.

So you have 4,000 physicians out of the 10,000 [total] who are fundamentally fairly restricted to practicing medicine in Puerto Rico and they get paid at a lower rate.

Subject: If you go to a generalist, for example, the [insurance] company may pay \$3 to \$5 to \$8 per patient.

JS: What do they pay the board-certified family doctor?

Subject: Maybe \$15, \$20.

Generalistas also make up the majority of physicians responsible for patients covered by

La Reforma, a capitated system with full risk assigned to the primary care physician.

Some subjects suggested this presents ethical dilemmas and negatively affects care:

If you need an MRI, they might think, no you don't need that at this point—but the person may actually need it, but he won't do it because it will affect his capitation, for example.

There are missed diagnoses. The per member per month is paid up front and spent by the GPs, who then do not do referrals to subspecialists because of the cost—because they are responsible for paying for it.

Sometimes they don't prescribe what the person may need because it affects their capitation.

All of them are doing the Reforma working for a very low capitation; an elderly patient is an adversary. [laughing]

The overwhelming concern about *generalistas* is the quality of care they provide.

I have been saying for many years that there is access but the care is substandard. Because we have many physicians that are poorly trained general practitioners.

And finally, as one *generalista* said of his discipline:

Some of them make you scared they are doctors.

Code **Generalistas: opposition**

All subjects agreed that *generalistas* would vigorously oppose the introduction of PAs to Puerto Rico. Antagonist subjects did not speak of controversies about *generalistas*, but when asked about them in follow up probes said *generalistas* would

oppose the introduction of PAs. Proponents felt that the *generalistas* were a large group that could block PA legislation. There is an important link between the *generalistas* and the quasi-regulatory Colegio de Médicos Cirujanos, which serves to predict the Colegio's likely opposition to PA enabling legislation.

The Colegio was established in 1994, in the beginning year of Governor Pedro Rosselló's administration, and the same year that *La Reforma* was implemented. A group of specialist physicians, who dominated the Colegio at the time, tried to mobilize the Colegio for changes in *La Reforma*, and the Rosselló administration succeeded in decertifying, or essentially disbanding the organization in 1997. Near the end of Pedro Rosselló's term as governor in 2001, the Colegio was reconstituted and membership was made mandatory.¹⁴² The *generalistas* were the main force that reorganized and achieved recertification of the Colegio, and they thus became the most powerful voting bloc, according to several subjects:

So they [a group of politically active elite physicians] tried to go against it [the Colegio] and got decertified. And when they got decertified, lots of physicians lost interest, they took the floor out and they were left nude, and so general practitioners who were the butt of jokes of all the specialists and subspecialists, the people who used to work on the margins of medical society, if you will, they took over the college, and they got recertified, and they played the game and they ran it for all these years, for ten years. And specialty doctors got ostracized.

The College of Physicians and Surgeons is divided in blocs, and in fact, since they [*generalistas*] are the majority, they dominate the college. Which is another issue really. So they do have a leadership role within organized medicine in Puerto Rico, but at the same time, their vision is a tunnel vision, it's very limited.

It's a very heterogeneous group. There is a large group of *generalistas* that basically have control of the Colegio, essentially because [there are more of them].

Generalistas were viewed as filling the same role that PAs would fill if they were legally authorized in Puerto Rico, giving them both economic and identity motivations for opposing PAs.

And I see that also as one of the hurdles for bringing in physician assistants to Puerto Rico, because the generalists are going to see them as another competition for their patient population.

I think that the drawback could be that some specialists could use physician assistants to do primary care, and eliminate general practitioners and that would be a great fight. Because there are so many general practitioners in the area that could be out of work.

Code Colegio: opposition

As explained above, the Colegio de Médicos Cirujanos is a quasi-regulatory body, originally a parallel advocacy organization to the Puerto Rico Medical Association. All licensed physicians in Puerto Rico are now required to be members of the Colegio. Though proponent subjects expressed little enthusiasm, and often disdain, for the Colegio and its activities, they often demonstrated the view that resistance is futile.

The College of Physicians and Surgeons, which would be the equivalent of the American Medical Association in Puerto Rico, which was what it used to be . . . by law the association used to be voluntary, you either belong or not if you want, but now in Puerto Rico, for you to be able to practice medicine you have to belong to the college, otherwise you cannot practice. And you have to pay dues to the college and it converts the college into sort of a union for all practical purposes.

You have to belong there, pay the dues, and that's it . . . that's the law. That's it. As simple as that.

It was universally agreed by subjects that the Colegio would oppose any enabling legislation for PAs, and that they are a powerful political force to be reckoned with:

The College was the one that was the most vocal in the last attempt to get [enabling] legislation [for PAs] passed, and then before that it was the medical association.

It was the College that basically fought against [PA legislation].

If they [the Colegio] speak against it, it's dead before it even gets to the floor.

There's a fear of MDs in the legislature right now, and I know the organizations will be against that. I don't think they would allow it here. I don't have any data—that's my opinion.

The medical college is opposed to all changes in medical practice here.

That is my point of view [that organized medicine would oppose PAs]. Maybe you have to see other people to recognize theirs, but Puerto Rico medical society is very closed, and defends MDs, medical doctors.

One antagonist subject, when asked in a follow up probe if the Colegio would oppose enabling legislation for PAs, replied acerbically, enunciating every syllable:

To-tal-men-te. (Totally)

Code “**Disorganized medicine**”

Both antagonists and proponents noted that organized medicine was divided into particular camps and incapable of uniting to achieve change in the health system or the medical practice environment. Though membership in the Colegio is mandatory, many subjects felt disenfranchised because of control by the majority *generalistas*. Though delicately stated, references to “narrow” or “tunnel vision” of the Colegio reflects dissatisfaction on the part of progressive physicians with the reactionary rhetoric and policies advocated by the Colegio's leadership.

While I was in Puerto Rico, I watched a televised legislative hearing where the Colegio's Executive Director testified in opposition to allowing primary care physicians to involuntarily commit substance-abusing psychiatric patients who are a danger to themselves or others. The Colegio argued that these functions must be limited to

psychiatrists. An interview subject subsequently told me that only psychiatrists are allowed to prescribe antidepressants in Puerto Rico, in stark contrast to the standard of care in the US mainland, where historically more primary care physicians than psychiatrists prescribe antidepressants.¹⁴³

Despite dissatisfaction and disagreement with the Colegio, physicians I interviewed were very fatalistic about the possibility of achieving any change in the Puerto Rico health system. Many subjects felt strongly that PAs are needed in Puerto Rico, but verbalized a belief in the inevitability of defeat of any enabling legislation for PAs. This is further discussed in the final section of this chapter, code **PA legislation: prognosis poor**.

Here are three subjects' comments about "disorganized medicine":

I am a little concerned; I don't want to mislead you about doctors because sometimes we ourselves can't function together as we should. So we don't unite with a common goal and that affects us greatly, and affects the practice of medicine, the health industry, because we should be an important voice. And we are not.

I don't think that even when we are organized under a college of physicians, I don't think this is a very united college. By tradition, I don't know if that happens in the states, but by tradition here physicians have been loners in respect to how they project themselves or see themselves in life professionally. So at the moment of getting united to battle something, we have our issues. Depending on what's been discussed, everybody gets united, or everybody gets dismantled.

. . . here in Puerto Rico we have a reality: the physicians are not a group of persons who work together. The college of physicians, everyone is doing what they want or what they need . . . and the interests are different.

Code **Nursing resistance**

When asked to think about who might oppose PA legislation, subjects listed the Colegio, the *generalistas*, and occasionally mentioned nursing. During the time I was

doing the field work in Puerto Rico, a bill to authorize nurse practitioners was filed in the legislature. There is one nurse practitioner program on the island, at Turabo University, but enabling legislation for NPs has not yet been passed. The NPs have set their sights on primary care. When I asked a subject to comment on the NP bill's prospects for success, the subject quipped:

Probably as bad as the physician assistants.

Organized nursing opposed implementation of dialysis technicians in Puerto Rico. A law was passed, but regulations were never promulgated because the nurses blocked them, and the dialysis technicians never became a reality.

The same college of nursing that promotes nurses developing more in their profession . . . the same college of nursing can be an impediment, as they have been for the dialysis technicians.

Another comment:

I think then that this role of physician assistant competes with the nurse practitioner.

And from one subject who had explored trying to implement PAs in Puerto Rico:

I remember clearly [names leader] told me, the biggest hurdle we were going to find was in the professional organizations of the nursing profession, because they were going to interpret, and we sort of predicted that, we were going to step on their toes. Because they were going to think that we are going to step in with PAs and they're going to be elbowed.

Code Patient acceptance

Both antagonists and proponents felt that patients in Puerto Rico would not accept PAs. This too was a futility argument: patients in Puerto Rico demand a physician, and resist any treatment by non-physicians. Several subjects said that patients expect the physician to measure their vital signs such as blood pressure and temperature. This was seen as part of the "hassle factor," making it

more laborious to practice in Puerto Rico than the US mainland, where vital signs are routinely measured by other health care workers, often medical or nursing assistants rather than registered nurses. And, it was argued that because patients expect physicians to do “mundane” tasks such as checking vital signs, the level of resistance to a non-physician practicing medicine would be insurmountable.

People don’t trust others who are not physicians. This is Puerto Rico. This is our reality.

. . . if I tell a patient in Puerto Rico that the PA is going to do a physical, is going to take a history, and then I’m going to review everything, huh uh! If it’s not you [the doctor], I’m not going to be touched by anybody. Sometimes it’s even a pain to convince the patients that the nurse is going to take their vital signs, their blood pressure, you know?

Not only would patients be suspicious about seeing a non-physician, subjects said there is a cultural belief in the need to see a specialist rather than a primary care physician for most problems. Just as the well established hierarchy of occupational prestige based on primary care or specialty is entrenched in the medical culture, patients affirm the hierarchy in their demands for care:

In Puerto Rico, in the mind of the Puerto Rican, he wants a doctor. With a white coat, this is a reality. And within this, for example, people don’t have much belief, or much confidence in a physician who doesn’t have a specialty. In Puerto Rico, if my head hurts, I go to the neurologist. If my stomach hurts, I go to the gastroenterologist. I don’t go to a family doctor, a generalist. Go directly to the sub-sub-specialist.

Politics: pervasive and polarized

Two overarching categories, structural aspects of “it depends on how you define access,” and the social-political organization of medicine and health care were revealed in my interviews. But a specific focus on politics is warranted, because it undergirds

every aspect of life and policy development in Puerto Rico—and medicine and health care are no exception. Within this theme, subjects discuss the ubiquitous nature of politics on the island, and the manner with which it imbues every aspect of medicine and health care. This results in a strikingly fatalistic view of the prospects for achieving enabling legislation for PAs. I coded these concepts:

- **Politics**
- **PA legislation: prognosis poor**

Code **Politics**

It is said that politics is the favorite sport in Puerto Rico. There is a level of awareness and engagement in politics that is very different from the mainland US. It is a perennial topic of lively conversation among people from all walks of life, and the showmanship and scandals do not disappoint. The passion and color of political life in Puerto Rico was seen during the campaign for the Democratic Presidential Primary in May 2008—where Barack Obama danced in the streets. There are more political parties, and more divisions within those parties, than the relatively staid Republican and Democratic parties on the mainland. Politics is part of the fabric of Puerto Rican culture, and underpinning the various perspectives are differing views of what should become of the island: status quo, statehood or independence. Politics pervades everything, and it is highly polarized.

Politics here in Puerto Rico is everywhere. Even if you don't want to have it, you have to have it because it's everywhere. It colors most of the decisions that run this country, it colors. Either if you're green, blue or red. Those are the three colors.

So [politics] is a whole political social, mumbo jumbo . . .

Politicians here are very strong-minded. If somebody from the red party brings an issue even if it's good, the blue one stops it just because it came from the red.

It's like the Congress . . . [politicians] don't hear anybody that's doing things. They just listen to votes. Only votes.

Some subjects felt that those in organized medicine who oppose the implementation of PAs will easily kill any attempts at enabling legislation:

But unfortunately this is a very political island, and whoever wins the Senate and the House of Representatives, whoever has the money, which many doctors here do, you know I have heard some of them say, "Over my dead body we will have PAs in here."

So we do have people within the system that really want this done [PA enabling legislation]. But the power is not at that level, the power is at the upper level. They're the ones that are keeping the whole thing down.

That's why I'm telling you, because in the legislature there are some doctors already there, eating there. [laughter] And they won't let that go forward. Political. I can guarantee you that.

Code PA legislation: prognosis poor

I encountered a fatalistic attitude toward the chances for successful implementation of PAs in Puerto Rico, in the face of cultural and political barriers. The underlying sentiment was one of futility—that any effort is doomed to failure, so energy should not be wasted on the effort.

There are more barriers than possibilities.

It's very hard. It's going to need a lot of people to push this piano.

And this exchange:

Subject: Theoretically it can work.

JS: In real life?

Subject: I don't think so.

One subject, who had explored the possibility of implementing PAs in Puerto Rico, said:

[Names a colleague] agreed that it was going to be a real rocky ride, a bad ride. People were not going to take years to convince the government, and then if something happened and the government changed, back to the drawing board. [loud whistle like a missile falling] Too expensive, too much work, too vertical the climb, so leave it there.

Understanding of the PA role and potential strategies for implementation

Beliefs about the role and scope of practice of PAs were elicited through questions about “the first words that come to mind when you hear the term physician assistant,” and “what do you think about the level of care provided by physician assistants.” These were also woven through responses to other questions in many cases. I specifically asked for suggested strategies and subjects’ responses identified potential practice niches. Several subjects suggested the need for a public education campaign. Though I initially coded the strategies according to location, discipline, or public education, I have collapsed these codes into one category. The codes for this section are:

- **PA role: understanding**
- **Strategies**

Code PA role: understanding

There was limited knowledge among subjects of PA scope of practice and utilization in the 21st century, even among proponents. Many subjects believed that PAs can only do a history and part of the physical examination, and then must turn the patient over to the physician. Most subjects, even proponents, were uncomfortable with the idea of delegating prescriptive privileges to PAs. These are some definitions of PAs offered by subjects:

An assistant.

A helper.

Well, it's a health professional that is considered as an intermediate position between the physician and the classic nurse.

I know that they are trained to take histories, they also can perform physical examinations, sometimes they can order labs and some of the physician work that facilitates the health services.

Well, my understanding is that the physician assistant is the person in charge of taking direct care of the patient, especially to take like the physical examination, ask all the right questions, ask the purpose of the visit, and write notes on the record. They don't prescribe medications, but they may intervene with the immediate need and make referrals.

Several suggested that PAs have the ability to function only within narrow clinical protocols:

I believe it is a person with a degree, certified, that I believe can exercise to some level the carrying out of processes within a clinical scenario.

A health worker, with defined functions and responsibilities.

I think that there is a very important place for them in certain specialties, and especially in dealing with a specific type of clinical problem where you may have a lot of the care that is delivered in the way of protocols.

One subject, who objected in theory to implementation of PAs in Puerto Rico, clarified that he personally had no problem with having an assistant to lighten his workload:

Personally, I have no problem with the PA idea. I would accept having someone to help me.

As might have been predicted by Everett Hughes,⁵⁵ there was willingness on the part of one subject to allow PAs to do the "dirty work;" one subject described trying to advocate for PAs to a physician colleague using the following argument:

I tried to give him a history of the great advance, and the great cost-effectiveness that introduced this professional into the health services because the physicians didn't need to do the whole work, there was this assistant, like a CEO who has 7 assistants [laughing] whose job is done quickly, of course, it's the people who do the hard work, the dirty work, the phone work, all the hard parts, all the time consuming parts, and it was more or less the same thing . . . but [he] didn't understand it.

There was some confusion among advanced practice nurses or nurse clinicians, and PAs (as may occur also in the mainland US):

Usually they [PAs] are nurses that have preparation that allows them to have extended functions, to assist the physician in distinct parts of the daily work that includes for example physical exam, prevention, and could allow some types of intervention for the patient, in procedures, et cetera.

As to the question of prescribing:

And I don't think I'm knowledgeable about what it is, but my wise suggestion would be, to have a simple line of things [formulary] that they could prescribe that is basic, that is less risk to the patients, and beyond that should be done with consultation with the physician—like narcotics, like anti-coagulation, like other stuff.

And the following politically pragmatic observation about prescribing:

Probably over the counter, I would have no problem, but other than that I think that's something that should be gradually introduced. That will be, if we start from the beginning with that, it probably will be harder to allow it here.

A few subjects were quite familiar with PAs and NPs:

That it is something that is called a physician extender; it extends the functions of the physician so that a physician can work a lot more efficiently here in number of patients seen.

They are people who are not physicians, who work hand in hand in the care of patients, under the supervision of a physician, or a group of physicians.

One subject reported working with a PA (functioning “below the radar”) in a rural area of Puerto Rico, a couple of decades ago:

Well, she did almost what a family physician would do except prescribe, and she was supervised by the other physicians, and the work was very good.

Code Strategies

All the responses below are from proponents, as antagonists did not believe PAs were needed in any setting in Puerto Rico. Proponents felt that PAs are needed in the medical and surgical subspecialties; these were the areas felt to be in crisis with respect to physician supply. These specialties are also most affected by physician flight from Puerto Rico, as *generalistas* are ineligible to practice in the US mainland.

Nephrology, obviously cardiovascular surgery, [general] surgery, orthopedics, neurosurgery, urology. Practically all the surgical specialties.

Puerto Rico definitely needs [PAs] right now, and probably will need it more in the future, depending on how the health situation in the island moves. If we continue to lose doctors, this is a very important step to consider in places that will have few subspecialists, and physician assistants can help to fill that void left by subspecialists that are leaving the island.

I think there is a very important place for them in certain specialties, and especially in dealing with a specific type of clinical problem.

Some people will not go [to the specialist] because of the waiting. And if a physician assistant or nurse practitioner, whatever, would accelerate that, it would be a lot better.

One subject warned against trying to implement PAs in primary care, due to competition with *generalistas* and nursing:

Subject: Yes, yes, possibly in another level [subspecialties] there could be room. But in the primary level, I don't believe so.

JS: Competition?

Subject: Absolute [competition]. [emphatic hand gesture]

JS: War?

Subject: War with the nurses, with the non-graduates, non-licensed [*generalistas*]*—*you will have a war.

The failure to prevent or manage chronic disease was listed by several subjects as a gap in care in Puerto Rico, and a potential role for PAs:

Maybe casting the function and how it would improve the ongoing care of chronic illnesses or even in the education and framing about lifestyles, that would be I think in essence carving a new niche.

I think also in the area of chronic diseases, as well as in primary care, a lot of the preventive, which is a big issue here, preventive health in Puerto Rico is not being adequately addressed. I think that physician assistants could do a lot of the preventive care that needs to be performed.

A hospitalist role was also suggested:

So if a PA has enough preparation or knowledge, this could be a type of person who could be in hospitals, watching our patients, seeing if patients deteriorate, making decisions fast in order to contact a physician or follow instructions depending on what's going on. And not having a nurse doing this by phone or just simply not doing anything because they're not physicians. So I would say there would be definitely a role in hospitals.

Mental health services are also understaffed, and two subjects saw a role for PAs there:

There are many problems of mental health in Puerto Rico. And there is a scarcity of psychiatrists, so if they could be trained to do case management . . .

And for example, there is one area in Puerto Rico that is very important, which is mental health . . . they decided a primary care physician cannot manage or prescribe antidepressants, and actually they have to be referred to a psychiatrist.

Two locations were suggested for pilot implementation projects, which would limit the scope of implementation initially, and allow demonstration of value and outcomes. First, the most rural areas, the outlying island municipalities of Culebra and Vieques:

. . . places where nobody wants to go to work, or rather where the doctors do not want to go to work. I understand this could be an excellent option as a response to the system where the system doesn't reach. With rural areas, and the island municipalities of Culebra and Vieques in our case.

Another subject suggested a favorable rural location for a pilot project was the mountain village of Castañer:

Other places where you could also have pilot projects would be places like for example, the village of Castañer. The village of Castañer is a rural

village up in the mountains, which is right in the middle of the juncture between three different rural municipalities, Yauco, Adjuntas and Lares. And you have a Mennonite hospital there, and they have terrible problems in attracting the professional services that they need up there.

In terms of other strategies, many subjects suggested an education campaign is needed.

But the future of PAs in Puerto Rico will be determined by how people are educated on the use of PAs . . . so this is like a product, you want to present it to the people, and then you want the people to ask for it.

People haven't been educated here to arrive to a conclusion that this is a very, very good thing for the patients. So you have to have an educational curriculum to educate people who are in the decision making process to understand that we need PAs in Puerto Rico.

Maybe if we have more information on the effectiveness of this group with health care services, especially primary care services, and the groups that are giving the services for the health reform . . .

Another subject suggested concerted educational, public relations and lobbying campaign targeting doctors, to help them understand how utilizing a PA will benefit their practice:

That the law be written in such a manner as to not be a threat, that he or she (the doctor) is going to gain by having a physician assistant. There has to be lobbying. Advocacy with the physician, to say to him, "it's good for you. It's good for your practice." This focus. How it will benefit you economically. To have this person at my side. I believe that this will be the most important. To work to present the physician assistant as a benefit, not as competition.

Themes: a summary

Themes that emerged from the 25 semi-structured interviews are sorted into broad categories: structural arguments, the social-political organization of health care, pervasiveness and polarity of politics, understanding of the PA role and suggested strategies for implementation. Within each category are recurring themes which are summarized below, with initial consideration of how the arguments were expressed by subjects.

Structural themes

Structural themes are summed up in the ironic phrase of several PA proponents, when asked to assess access to care in Puerto Rico. They smiled or laughed and said, “it depends on how you define access.” If access is a measure of doctors per square mile, access is good, as antagonists assert. If it is measured by time, either in travel time on public transportation, or hours in a clinic reception area waiting to be seen, or the struggle to find an orthopedist if you break your leg, access is not as optimal as the antagonists allege. Further, proponents argue that doctors, particularly specialists, are leaving the island, exacerbating access problems. And if PAs are not needed, why are specialists utilizing health professionals in expanded roles to assist them, “below the radar”?

- **Access: geography: adequate (AG) or barrier (PG)**

Antagonists observed that the island is small, and argued that PAs were created for the US mainland in response to “wide open spaces” with inadequate access to care. In their view, health care is never more than a few minutes away and is easily accessed. They expressed their views logically and dispassionately, “just the facts” of short distances easily confirmed by looking at a map of the island.

Proponents saw the same island and acknowledged its relatively compact size, but observed that transportation is problematic and clinical services are not as readily available as they appear on the surface. They hearkened back to Guillermo Arbona’s observation that time to travel to health care should be used as a measure of access, not distance in miles.¹⁰⁰

- **Physician supply: sufficiency (AS)**

Antagonists cited the number of physicians relative to population, combined with the small size of the island, and concluded that Puerto Rico enjoys excellent access to health care services. They cited the four medical schools and ready access to general practice physicians, as well as health insurance coverage of a the majority of the population through *La Reforma*, as arguments in support of excellent access to care. Again, logic was the prevailing mood, with the transparently obvious conclusion based on the number of doctors per square mile—PAs are not needed.

- **Physician supply and specialists: negative (PS)**

Proponents observed that while there are many *generalistas* available at the primary care level, specialist care is increasingly difficult to access. Subjects cited shortages in several disciplines including neurosurgery, orthopedic surgery, obstetrics and gynecology, and general surgery.

Antagonists rarely mentioned specialist availability, but when prompted in follow up probes, argued that the problem was due to a need for tort reform. Proponents clearly saw PAs as a solution to the problem of access to specialty care; as one subject observed, “I think in the subspecialties they are already screaming for them.”

- **Access: waiting for care (PW)**

Waiting for care is a critical measure of health care access for proponents. The cultural norm is an absence of any real appointment system, requiring patients to arrive at clinics in the early morning hours to sign in and wait for hours to be seen. Persons of means with private insurance may be seen readily in primary care, while those covered by *La Reforma* may expect waits to be seen. In the medical and surgical subspecialties,

restricted access means everyone must sign in and wait. One subject observed that privately insured patients decline specialty referrals as they refuse to sit for hours for in a waiting room.

- **Doctors leaving Puerto Rico (PE), (AE)**

Board certified physicians, particularly subspecialists, are increasingly leaving Puerto Rico to practice in the mainland US. Reasons include the “hassle factor”—the difficulties of practicing in Puerto Rico, including lower income and fewer clinical support staff.

For antagonists, tort reform and enhanced reimbursement will solve the problem. Further, antagonists warned of jeopardy, that PAs, if successful, would encounter an even worse practice environment—PAs would be better off not fighting for this territory as it is undesirable.

Proponents see an urgent need for PAs to offset the impact of physician flight from the island. Many proponent subjects had worked or trained in the US mainland and have first hand experience with PAs in specialty settings.

- **Health policy “below the radar” (PR)**

Proponents cited several examples of health professionals, often technicians or nurses, being used in expanded subordinate roles because PAs are not available in Puerto Rico. These roles are often quite organized, with titles like “assistant”, and often involve duties that are beyond what is legally authorized for the subordinate profession. These mechanisms, used to fill some of the need that PAs would address, were cited as evidence that PAs are immediately needed.

Social-political organization of health care in Puerto Rico

- **Physician occupational prestige**

Abbot⁴ and others include prestige as a key component of a profession, particularly medicine. Starr called medicine “an exalted profession,”⁵⁹ widely admired and awarded trust and privilege in society. An unstated issue of shared jurisdiction, where a profession cedes a portion of its span of control to another occupational group, is loss of prestige. While physicians in Puerto Rico face many challenges, they enjoy an exalted societal position, as one subject told me; they are “demi-gods.” There is a hierarchy of prestige in Puerto Rico’s medical world, with subspecialists at the University of Puerto Rico Medical Center at the top, and *generalistas* at the bottom. Those most likely to resist PAs will be those at the bottom of the hierarchy, where PAs would occupy a position dangerously close, threatening not only prestige but livelihood and job security.

- **Generalistas**

Generalistas are a collective secret in Puerto Rico, controversial but not openly discussed. They graduate from non-accredited foreign medical schools, take a local board exam that is administered in Spanish, and are only required to do a year-long non-accredited internship in order to be fully licensed to practice. *Generalistas* comprise 40% to 50% of physicians in Puerto Rico. They are the workhorses of the *La Reforma* system, with capitated reimbursement and full risk assigned to them at the lowest levels of reimbursement by insurers. While they are widely regarded as substandard, the system is dependent on them.

- **Generalistas: opposition**

Generalistas dominate primary care in Puerto Rico. Because PAs have historically been deployed in similar roles, subjects universally believed that *generalistas* would oppose the implementation of PAs. PAs would threaten their identity, and would be seen as threatening their job security and incomes. As many subjects observed, *generalistas* would fear being supplanted by PAs, and would use their political clout to block any attempted enabling legislation. Subjects spoke of *generalista* opposition as inevitable, and any attempt to fight them to achieve legislative change as futile.

- **Colegio: opposition**

All physicians are required to be members of the Colegio de Médicos Cirujanos in order to practice in Puerto Rico. The agency is widely seen as reactionary and oppositional to any innovation in health care. Dominated by *generalistas*, who make up the bulk of membership as the largest voting bloc, the Colegio was reorganized and recertified by *generalistas* after being disbanded in 1997. The Colegio was seen as a formidable enemy, capable of killing any legislation. This too was expressed by subjects in terms of futility.

- **“Disorganized medicine”**

Physician subjects felt that medicine as a profession is ineffective at working together to initiate change. They observed that specialties work for their own interests, that physicians are “loners” and incapable of uniting toward a common goal. This was no doubt exacerbated by the events of the Colegio, with its disbanding and reconstitution with the *generalistas* in control. Perhaps for this reason, subjects did not believe that a higher prestige bloc of physicians could overcome an effort by the Colegio to defeat any

legislation enabling PAs. The mood of respondents was that of a lack of self-efficacy, a disbelief in their own ability to achieve desired goals.

- **Nursing resistance**

Nursing was seen as potentially problematic, and capable of squelching any effort to implement PAs. The example cited was that of dialysis technicians, who achieved passage of enabling legislation but were subsequently blocked by organized nursing. In addition, nursing has pending legislation to authorize nurse practitioners, with their sights set on primary care, and PAs would be seen as threatening that because of their history of utilization in primary care. Again, futility was the overwhelming mood expressed—failure is inevitable, so why fight?

- **Patient acceptance**

It was stated that the desire to see a physician, and ideally a specialist, is the “reality” for patients in Puerto Rico. Subjects cited patients’ reluctance to even have their vital signs checked by a non-physician, and predicted that PAs would not be favorably received by patients. While this challenge occurred also in the mainland US as PAs were rolled out in one state after another, Puerto Rico’s situation was characterized as unique, an unalterable cultural norm so firmly entrenched that it will result in defeat of any forays by PAs.

Politics: pervasive and polarized

- **Politics**

Politics is everywhere in Puerto Rico, and the current mood is even more volatile than usual. The current governor, under indictment for campaign finance violations, is running for reelection. Former governor Rosselló was defeated in the gubernatorial

primary for his party, but remains locked in an ongoing battle with Luis Fortuño, who won the nomination. The Executive Director of the medical board was indicted for selling passing scores on the “local board” exam. One subject characterized the environment as “being in the middle of a hurricane,” and advised it is not a good time to pursue legislative change. While politics may be the favorite sport of Puerto Rico, the current mood is even more polarized than usual. Subjects expressed a concern for jeopardy, due to roiling political waters, and advised careful timing for any legislative effort.

- **PA legislation: prognosis poor**

Futility and a lack of self-efficacy dominated the discourse of all subjects, proponents and antagonists alike. As one subject resignedly stated, “it’s going to take a lot of people to push this piano.” Another stated that while theoretically PA enabling legislation is possible; the subject felt the reality is that it is impossible.

Understanding of the PA role and potential strategies for implementation

- **PA role: understanding**

There is a lack of understanding of the role of the PA in health care, even by proponents. PAs practice medicine with physician supervision, including prescribing and performance of highly technical procedures in relatively autonomous settings, but subjects often thought that PAs took histories and turned the patient over to the physician. They believed that PAs must function within narrow protocols, and rarely viewed prescribing as an appropriate task. Improved knowledge of PA scope of practice and utilization will be crucial to any legislative effort.

- **Strategies**

Many subjects suggested an education campaign, and hiring a lobbyist who can negotiate the various political factions in a relatively even-handed fashion. While lobbyists in the US mainland must work “both sides of the aisle,” in Puerto Rico the political facets are much greater than binary.

Many potential practice niches were suggested by subjects. The most frequently suggested niche was in subspecialty care, where crises of access and physician flight from the island are increasing the urgency of the need for solutions. Other niches suggested include primary care in the outlying municipal islands of Culebra and Vieques, and the mountain village of Castañer. Other possibilities include chronic disease, prevention, and mental health.

In conclusion

In 25 semi-structured interviews with thought leaders in medicine and health care in Puerto Rico, I sought to learn about Puerto Rico’s health care system and the potential for implementation of physician assistant legislation on the island. Interview subjects either favored the implementation of PAs (proponents) or opposed their introduction (antagonists). These groups looked at the health care system and saw widely differing pictures of access to care. The medical profession in Puerto Rico is highly stratified; this is seen most starkly in the position of the *generalistas*, who are marginalized and widely viewed as substandard practitioners, but comprise the glue that holds together the system of managed care for those patients covered by *La Reforma*. Health care in Puerto Rico is highly politicized with multiple, strong interest groups, and opposition to PAs can be expected from the *generalistas*, the Colegio, and nursing. The PA role and scope of

practice is poorly understood, even by most proponents, and some suggested an education campaign is needed. Suggested strategies for overcoming opposition included generating niches for PA practice in the medical and surgical subspecialties, as well as by implementing rural pilot projects in Culebra, Vieques and Castañer.

In the next chapter, I will discuss the findings that emerged from the interviews in greater detail. In the final chapter, I synthesize what I learned to recommend strategies for achieving enabling legislation for physician assistants in Puerto Rico.

CHAPTER VII

DISCUSSION

Through the process of interviewing subjects, transcribing the interviews, analyzing the discourse for salient themes and naming them in the form of codes, I sought to understand what these key informants thought, felt and believed about physician assistants and their potential utilization in Puerto Rico. These thoughts and beliefs exist within the political, social and cultural context of health care and the practice of medicine on the island, and provide a window into the cultural and political challenges for implementation of PAs.

In this chapter I delve more deeply into the specifics of what was said, to find hidden meaning, where it may exist, and question or highlight the obvious as appropriate.¹ The synthesis will then be used to formulate the implementation plan, as public policy is not merely based on useful ideas, but also on the reality of what is emotionally acceptable and politically achievable.

Although this dissertation concerns physician assistants, a clear picture of the cultural and political context of health care delivery in Puerto Rico is critical to understanding the potential barriers and facilitators of a proposal to implement PAs. Politics is woven throughout, and professional and personal identities are an unspoken part of political decision making. Public policy is not just a series of logical decisions; it is a highly emotional process. In Spanish, politics and policy are the same word: *politica*.

Puerto Rico's health care system

The health system of Puerto Rico is based on the tenet of access to care for all, reflecting its historic and cultural links to Spain. In the 1950s, shortly after Luis Muñoz Marín became the first elected governor, Guillermo Arbona led the implementation of a regional system designed to assure access to care for rural residents. Arbona's approach was later emulated in Cuba and Eastern Europe. Puerto Rico's medical and public health leaders look back at the Arbona system with pride, nostalgia and regret. While subjects often employed logical arguments about the state of health care access in Puerto Rico and the potential role of physician assistants, the emotional ties to the Arbona system were evident.

Spiraling costs in the 1970s and 1980s impelled the need for change, and the move toward privatization began. In 1993 Governor Rosselló gained the public's support for system change and instituted *La Reforma*, a form of managed competition for those covered by public insurance—what the Clinton health plan might have been in the mainland, had it succeeded.

While *La Reforma* has attempted to maintain access for all, covering part time workers, housewives and others not covered by Medicaid in the states, costs have continued to skyrocket. To control costs, *La Reforma*'s design is a capitated system with full risk assigned to primary care providers. Reimbursement is low and there are long waits for specialty services such as orthopedics or neurosurgery. Many interview subjects expressed frustration with the current system, and argued that it is the reason many board-certified physicians, particularly subspecialists, are moving to the mainland US.

In the fall of 2007, scandal erupted at the TEM (the medical licensing board) as it was alleged that the executive director was selling passing scores on the “local board,” the examination administered in lieu of the USMLE. The majority of those taking the local board examination are foreign medical graduates who do a one-year, usually non-accredited residency, and enter general practice—the *generalistas*, who comprise about forty percent of those registered as physicians on the island. There is a political and quality divide between the *generalistas* and board-certified physicians who complete accredited residencies and the USMLE examinations.

A greater percentage of the population has insurance coverage in Puerto Rico than in the mainland US, due to the broad scope of *La Reforma*. The percentage of uninsured in 2003 compared favorably at 8% to the US overall for the same year, at 15.6%.¹¹⁰ This wide coverage and generous benefit package has resulted in health care spending as a percentage of GDP that is the highest in the world—greater than the mainland US.¹⁰⁹

Politics: pervasive and polarized

It is said that politics is the favorite sport in Puerto Rico, and as one subject said, “it colors everything.” There are three major political parties, representing the viewpoints of those who desire statehood, independence and maintenance of the status quo. Within the parties, members may be Republican or Democrat. For example, in the March 2008 gubernatorial primary of the pro-statehood New Progressive Party (PNP), Republican Luis Fortuño ran against Democrat and former governor Pedro Rosselló. Fortuño prevailed, and is running against Anibal Acevedo of the Popular Democratic Party (PPD) in the November 2008 election.¹⁴⁴ In another twist, Acevedo was indicted in May 2008 for conspiracy to commit campaign finance fraud, among other charges, and five new

charges of wire fraud and conspiracy to commit money laundering were added in August 2008.¹⁴⁵

This complex mélange of competing political interests, combined with Puerto Ricans' passionate engagement in the political process, make advocacy for implementation of physician assistants challenging. Politics in Puerto Rico is highly polarized, and I was warned that one party may reject a policy proposal simply because it was proposed by another party. Even within parties, there is polarization. The PA argument must be framed so that the varying political factions can embrace it as a benefit to Puerto Ricans, and a lead advocate for PAs would ideally be widely admired, respected and seen as above the fray.

Structural themes considered

“It depends on how you define access”

Several subjects, when asked the standardized question: “What is your assessment of access to health care in Puerto Rico?” replied “it depends on how you define access.” This was stated with an ironic smile or a laugh. Those who made this statement felt that access was poor. In particular, though there is ready access to primary care that care is delivered by *generalistas* and is widely regarded as substandard.

Those who argued that access was good based their statement on the numbers: the number of physicians and annual graduates from Puerto Rico's four medical schools; Puerto Rico is a small island, just 100 miles wide by 35 miles deep. For antagonists, issues of health care access can be measured in practitioners per square mile, and is a positive equation. Within this calculus, the assumption may be made that PAs are not

needed. Those who argued access was poor looked beyond the numbers and saw problems—and a need for PAs.

Puerto Rico is a small island with high population density, and the rugged mountainous terrain and lack of public transportation make travel problematic for those who do not own cars. Many people are dependent on *públicos*, private mini-vans that provide transportation between cities. These vans are often overloaded, and function only during daylight hours. They have no fixed routes and deviate from the main roads to pick up and drop off passengers along the way, stopping frequently. While they are relatively inexpensive, they are also unpredictable and inconvenient.

Guillermo Arbona said in the 1970s that access to care should not be measured in miles, but in travel time.¹⁰⁰ Because the island has a population of nearly four million and more than two million vehicles,¹⁴⁶ traffic congestion is a problem at all hours, especially in the urban areas. For this reason, actual travel time does not correlate well with distance traveled. This adds an additional layer of difficulty in accessing health care.

Another challenge to access is waiting time to be seen in clinics. Interview subjects, and people I spoke to casually about health care during three visits to Puerto Rico, explained that there is no real appointment system. Patients must arrive early and sign in, then wait for hours to be seen by the clinician. Whether a primary care clinic caring for the medically indigent in a rural area or a high-end subspecialty private practice, whether the patient is rich or poor, they must wait hours to be seen. Several subjects felt that wait times were a mechanism for damping down demand and constitute evidence of a shortage of medical personnel and poor access to health care. Waiting for

care due to absence of an appointment system may be culturally bound as well as structural. This is discussed later in this chapter.

Is there inadequate access to care because there are not enough doctors? By the numbers, antagonists are correct—there is no shortage of physicians, although to paraphrase several respondents, the adequacy of the physician workforce in Puerto Rico may depend on how you define physician. According to information from the Colegio de Médicos Cirujanos, as of 2006 there were 22.8 physicians per 10,000 population,¹¹⁸ as compared with 23 physicians per 10,000 population for the US overall in the same year.^{120, 121} While the numbers argue that there is no shortage of physicians in Puerto Rico, further analysis suggests that the US and Puerto Rico cannot be directly compared.

Physician shortage or not?

For the most recent year data are available (2006), there are about the same number of physicians per 10,000 population in Puerto Rico as in the US overall. But there are important differences in the health care workforce in Puerto Rico. In the mainland US, there is about one PA and one nurse practitioner for every 10 physicians.¹⁴⁷ Although the degree of substitutability, or the “percentage” of a physician represented by one PA or NP, is the subject of ongoing debate, even arbitrarily (and conservatively) defining one PA or NP as equal to one half a physician raises the physician number to 25.5 per 10,000 in the US overall.

By the numbers, there appear to be enough primary care physicians in Puerto Rico. A closer look, however, reveals potential problems. The overwhelming majority of primary care physicians are *generalistas*, who were regarded by proponent subjects as substandard compared to those board-certified in a primary care discipline such as family

medicine, general internal medicine or pediatrics. The *generalistas* are not analogous to primary care physicians in the mainland US, and are considered in further detail later in this chapter.

Elite physician flight from the island is creating a crisis in access to specialty care such as orthopedics and neurosurgery, according to interview subjects and Colegio documents. Low levels of reimbursement, inadequate malpractice insurance coverage and the “hassle factor” of doing routine tasks usually delegated to support staff in the mainland are leading many board-certified physicians to leave the island. This also has the effect of increasing the percentage of *generalistas*, who are not eligible to practice in the US mainland and therefore remain in Puerto Rico.

All subjects felt there is a crisis of access to specialty care, though the antagonists felt this is primarily due to malpractice insurance problems, and would be solved by tort reform. Proponents observed that half of the graduates of Puerto Rico’s medical schools must go to the mainland for their residencies, as there are not enough residency training slots on the island. According to subjects, many of those who leave the island never return, and among those who complete their residencies on the island, many go immediately to the mainland to practice. Several proponents had lived or practiced in the mainland US and were familiar with PAs, and felt they were urgently needed in the surgical and medical subspecialties in Puerto Rico. As one subject said when asked if PAs are needed in Puerto Rico, “I think in the subspecialties they are already screaming for them.”

Several subjects cited utilization of other health professionals in informal expanded roles as further evidence that PAs are desperately needed, and provided

examples of these “below the radar” solutions to physician workloads. If PAs are not needed, they argued, why are specialists pushing the legal envelope to use other health professionals above their licensed functions? Examples provided included a male nurse functioning in an expanded role in urology (“like a PA”), and foreign medical graduates trained in surgical specialties who are unable to be licensed in their disciplines without completing a residency, who are functioning much like hospitalists PAs.

The social-political organization of medicine in Puerto Rico

Physician occupational prestige

Physicians in Puerto Rico enjoy an exalted position in society; as one subject expressed to me, a standing joke is that MD stands for “Medios Dioses”—demi-gods. Within this elevated standing, however, there is internal stratification based on whether the physician is in a primary care discipline or a specialty, whether a US or foreign medical graduate, and which medical school the physician attended in Puerto Rico. At the same time, the exalted status of physicians in the mainland US has declined since the “golden age of medicine” of the 1950s. Frustration expressed by subjects about *La Reforma*, and nostalgia for the days of the Arbona system, may be related to a similar erosion of control of practice.

Another limitation to access described by interview subjects was the phenomenon of waiting for care, which appears on the surface to be purely a structural problem. However, the absence of an appointment system cannot be completely explained by a shortage of physicians, although it is common in resource-poor settings in the developing world. The absence of an appointment system, and the resulting waits of many hours to be seen by the physician, may also be viewed through the lens of occupational prestige.

Abbott notes, “a profession clearly derives general social prestige from meeting clients on *its* own, rather than on *their* own grounds.”⁴

Generalistas and their predicted opposition to PAs

Throughout the interview process, I was particularly cautious about my fluency in Spanish, and did not accept any Spanish language commentary at face value. Had I not been committed to understanding every word and interaction in its deepest meaning, I might not have learned about the *generalistas*. It would have been easy to assume that *generalistas* were simply general practitioners, which in medical circles is simply a less precise term for family physicians. In fact, *generalistas* represent a collective secret, in the anthropological sense,¹³⁰ a controversial and discomfiting group of practitioners that everyone is aware of but does not talk about. It took some probing to learn about the *generalistas*.

Generalistas occupy the lowest rung of the prestige ladder within the medical profession in Puerto Rico, yet comprise more than forty percent of providers in Puerto Rico, and they dominate primary care. Through their sheer numbers they have gained control of the Colegio, and to date have successfully blocked legislative efforts to eliminate the “local board” exam (which is administered in Spanish) and mandate USMLE (administered only in English) as the entry level requirement for medical practice in Puerto Rico. They were also politically astute in seizing the opportunity provided by the decertification and reconstitution of the Colegio in the mid 1990s to gain a measure of control of medical regulatory policy.

The level of training for the *generalistas* is far below that of physicians who attend LCME-accredited medical schools, pass the USMLE, and complete a three year

accredited residency. *Generalistas* attend foreign medical schools, usually in the Dominican Republic and Mexico. These schools are not accredited by LCME, have minimal prerequisite requirements, and the MCAT is not required. Instruction is in Spanish, as most *generalistas* have inadequate fluency in English, and this is a major factor causing them to attend offshore schools. But some of these *generalistas* may be excellent clinicians, based on what they have learned on the job through years of practice. However, the quality of care provided by *generalistas* is uneven at best, and because their “creole internships” are in hospitals, they are unfamiliar with the outpatient setting and often do not provide preventive services. Interview subjects familiar with the tertiary care setting observed that the quality of diagnosis and treatment provided by *generalistas* prior to referral of the patient was often poor.

Generalistas are economically crucial to the health system in Puerto Rico, because they represent the overwhelming majority of primary care providers and accept low levels of reimbursement under the capitated system of *La Reforma*. It was suggested by several subjects that *generalistas*, because they are assigned full financial risk under the capitated system, are relied upon to control costs by not ordering expensive imaging studies such as computed tomography and magnetic resonance, and delaying or refusing referrals to specialists, perhaps even when they are needed.

Subjects universally predicted that the *generalistas* would oppose the implementation of PAs. This might be expected sociologically, as those lowest in the hierarchy are most threatened by incursions of those in analogous roles.⁶⁵ *Generalistas* occupy roles historically assigned to PAs in the mainland US—primary care for rural and medically underserved populations. While PAs are increasingly moving to other roles,

such as subspecialties and academic hospitalist positions, it is likely they will be seen by the *generalistas* as a threat to their occupational position, endangering both identity and income.

The *generalistas* are politically positioned to squelch PA enabling legislation should they wish to, given their dominant numbers in the Colegio, and the Colegio's apparent ability to block innovation in medical practice.

Colegio: resistance to innovation

The Colegio is a quasi-regulatory agency that appears on the surface to be a voluntary professional association, similar to the Puerto Rico Medical Association, but membership is mandatory for any physician who wishes to practice in Puerto Rico. While the TEM is the government licensing agency, the Colegio plays an advocacy role. Their web site slogan is “protecting the health of our people!”¹⁴²—but according to several interview subjects, the Colegio is also devoted to resisting innovation in medical practice. Proponents predicted emphatically that the Colegio would oppose any enabling legislation for PAs, as they had vociferously opposed a previous legislative attempt.

“Disorganized medicine”

Several proponent subjects spoke of physicians' inability to unite to advocate for changes in health policy. Physicians in Puerto Rico aggregate in polarized factions with divergent interests, reflecting both the political aspects of Puerto Rican culture and the distance between the varying disciplines in the medical hierarchy. While *generalistas* occupy the lowest rung of occupational prestige, they seized the opportunity to take control of the Colegio when it was decertified in the mid-1990s. The other disciplines, especially the medical and surgical subspecialties, regard the *generalistas* as having

“tunnel vision” regarding health care and medical practice, but are fatalistic about their own ability to achieve meaningful change. The sentiment was that of futility—which will be discussed later in this chapter.

Nursing resistance

Several interview subjects, when asked what might be the barriers to achieving enabling legislation for PAs, predicted that nurses would prove to be vigorous opponents. Subjects reported that nurses succeeded in blocking the implementation of dialysis technicians in Puerto Rico at the regulatory level, after passage of enabling legislation had been achieved. Although I did not interview nurses for this study, it likely that organized nursing will oppose the implementation of PAs in Puerto Rico.

In January 2008, while I was in Puerto Rico conducting interviews, a bill to authorize nurse practitioner practice was filed in the legislature. There is one family nurse practitioner program on the island, at Turabo University, although NPs are legally unable to practice. The NPs have set their sights firmly on primary care as they struggle for recognition, setting the stage for a turf battle between NPs and the *generalistas*.

On the national level, organized nursing has a record of opposing other health professions they regard as threatening incursion into their scope of practice or span of control in the workplace. The American Nurses Association successfully blocked the American Medical Association’s creation of a new bedside caregiver, the registered care technologist, in the 1980s.¹⁴⁸ Enabling legislation for PAs was delayed for years in New Jersey and Mississippi because of active opposition by nursing.

Patient acceptance

Several subjects predicted that patients in Puerto Rico would not accept PAs. They cited a cultural expectation that physicians perform every task related to patient care, including taking vital signs such as blood pressure—tasks usually delegated to support staff in the mainland US. Patients’ refusal to accept PAs was also predicted in the early days of the profession in the mainland US, a claim that persisted long after studies were published documenting high levels of patient satisfaction with PAs. This too is a futility argument—suggesting that even if legislation is passed, PAs will be rejected by patients. However, based on the US mainland implementation model, the key ingredient in patient acceptance of PAs is physician acceptance and endorsement. From Eugene Stead, MD and E. Harvey Estes, MD in North Carolina, to Henry Silver, MD in Colorado, to Richard Smith at the University of Washington, physician champions have fought for the implementation of PAs. Physician leaders are persuasive to their peers, and patients look to physicians for decisions regarding their health care. Because patients trust physicians, they accept PAs when they are recommended enthusiastically by their doctors.

Discourse and rhetoric: a synthesis

The language and tone of the discourse within the interviews is as important as the content. While antagonists used logic to reject the need for physician assistants, the words they chose, and what they did not say, provide further clues.

Albert O. Hirschman characterized reactive thought in *The Rhetoric of Reaction*, defining three major arguments that conservatives use against progressive innovation.³ First, perversity, which is “a special and extreme case of the unintended consequence.” In

this scenario, intended reforms move society in the opposite direction, causing dire outcomes—“everything backfires.” A second argument is that of jeopardy, which asserts that a policy change may be desirable, but that the cost of it will be intolerable. The third argument is that of futility: that change will be cosmetic in nature, while “the ‘deep’ structures of society remain wholly untouched.” In the futility thesis, attempts at change are pointless.

Both antagonists and proponents used the rhetoric of futility. Examples include “disorganized medicine,” where attempts to engage physicians in uniting for policy change will be futile, and patient acceptance, where legislation might be achieved but PAs will be rejected by patients. A visceral antagonist subject argued that there was no point in PAs seeking to practice in Puerto Rico, because they will encounter a negative practice environment, and be treated like “cheap labor.”

The rhetoric of futility may be due to an underlying cultural tendency toward fatalism, as suggested by one interview subject. It could also be regarded clinically, as a type of “helpless—hopeless” attitude characteristic of depression—voiced by overworked and frustrated subjects who in many cases felt PAs were desperately needed, but had become exhausted in attempting to achieve change.

Hirschman suggests that futility is a “last gasp” argument—that perversity and jeopardy are argued first, and when unsuccessful, reactionaries resort to futility: there is no point in attempting change. As I analyzed the interview transcripts, I was struck by the absence of the perversity, and particularly jeopardy arguments by antagonists. Two decades ago the preponderance of arguments against PAs in the mainland, as legislative efforts proceeded state by state, were that PAs posed a danger to patients. Antagonist

subjects never resorted to these arguments, rather, they observed that PAs were useful and necessary in the mainland US due to its wide open spaces, but Puerto Rico, being smaller and having a sufficient number of providers, did not need PAs. This too may be cultural—perhaps such negative opinions are not voiced within professional decorum, and subjects were graciously sparing my feelings.

Both antagonists and proponents suggested that achieving passage of enabling legislation will be a pyrrhic victory for PAs, as they will encounter low salaries and a negative practice environment. There may be some validity to this argument, and it should not be discounted by PAs as they seek change—physicians in Puerto Rico earn about half that of physicians in the mainland, and it is unlikely this ratio would be different for PAs.

Another interesting aspect of discourse within the interviews: even the subjects most vociferously opposed to PAs used the future form of verbs, rather than the conditional or subjunctive, when discussing the possibility of implementing PAs. The subjects stated “you will” rather than would, might or may. This, combined with the futility argument, suggests that even as they argued against PAs, antagonists saw PAs as inevitable.

I now briefly consider strategies suggested by subjects, and preview my recommendations for implementation, based on what was learned in the interviews.

Strategies and recommendations for implementation

Interview subjects suggested several areas where PAs could be useful in Puerto Rico: primary care, managing chronic disease, providing preventive services, and serving as hospitalists. PAs perform well and add value providing all these services in the

mainland, but all these particular functions are problematic in Puerto Rico as they represent incursions to the *generalistas*' turf. Further, primary care is the site of an impending battle between nurse practitioners and the *generalistas*.

Another suggested area, mental health services, is largely untapped and has huge potential for improving access to care in the mainland, but would be an unlikely choice in Puerto Rico, where primary care physicians are not legally authorized to prescribe antidepressants or involuntarily commit patients who need hospitalization for psychiatric conditions.

A limited use of PAs in the University of Puerto Rico Medical Center as a pilot project may be the best way to phase in the concept and use of PAs. The medical and surgical subspecialties present the best and most viable option for a pilot project utilizing PAs. Specialist care is in crisis in Puerto Rico, as physicians leave for the mainland and problems with access to care worsen. Access to specialists presents a problem for patients regardless of socioeconomic status and for primary care providers across the island as they attempt to refer patients for needed care. Specialist physicians are also most likely to have trained in the US mainland and thus have experience working with PAs.

Pilot implementation of PAs in medical and surgical subspecialties, could begin with those specialty disciplines that are most anxious to utilize PAs within the University of Puerto Rico Medical Center. To avoid any implication of violation of confidentiality as a result of this study, the AAPA special interest group on Puerto Rico could send a proposal to Department Chairs, Division Chiefs, the Dean and Chancellor, offering to provide assistance if the idea is attractive to them.

A pilot project limited to one institution and the subspecialties avoids the problem of turf wars with the *generalistas* and nursing, where the *generalistas* dominate outpatient primary care service delivery, and nurse practitioners seek part of their jurisdiction. Further, specialist physicians enjoy the social capital of occupational prestige within the hierarchy of medicine, which would logically be extended to their physician assistants.

The pilot project would most effectively be located at the University of Puerto Rico Medical Center, allowing implementation by a local law. Local laws are passed by a state or territorial legislature but they are limited to a county, city or institution. Thus, physician practice would be authorized but only at the University of Puerto Rico Medical Center, nowhere else on the island. This would dampen opposition by limiting it to a demonstration project, rather an island-wide initiative. Also, UPR is the most prestigious medical institution in Puerto Rico, and its medical and surgical subspecialists are highly regarded. They are also among those most at risk for being recruited to the mainland, and because UPR is the “safety net” tertiary care center, it is more likely that legislators will look favorably on requests from its leadership for limited implementation of PAs.

While the initial project would focus on subspecialist implementation, primary care should not be entirely ceded to *generalistas* and advanced practice nursing, as PAs, who are trained in primary care and have a proven track record of service, have much to contribute to primary care service delivery in Puerto Rico. Pilot projects in primary care on the rural island municipalities of Culebra and Vieques, and in the mountain village of Castañer, were suggested by interview subjects, and should be considered in the future.

Education and advocacy will be crucial to the success of any effort, and specific recommendations are provided in the final chapter, along with further discussion of implementation plans for the pilot project.

CHAPTER VIII

IMPLEMENTATION PLAN

This goal of this dissertation was to understand why there is no enabling legislation for PAs in Puerto Rico, and to use that understanding to initiate an implementation plan. The previous chapter made an initial argument that a pilot project in the medical and surgical subspecialties at the University of Puerto Rico (UPR) Medical Center would be the best initial approach to implementation of physician assistants on the island. While PAs have historically achieved enabling legislation because of their ability to improve access to primary care, especially for the medically underserved, this approach is unlikely to succeed in Puerto Rico, due to the dominance of the *generalistas* in primary care and their influence on legislation through the Colegio.

A majority of respondents agreed there is a crisis in access to specialty care, which is being exacerbated by the flight of board-certified physicians to the mainland. Patients from all socioeconomic backgrounds and with all types of insurance coverage experience difficulty in accessing specialty care, and primary care physicians experience problems getting appointments for their patients to be seen in consultation. Subspecialist physicians at the University of Puerto Medical Center are most likely, among all physicians on the island, to have trained or worked with PAs on the mainland. And subspecialists are the most vocal proponents of PA implementation.

Because “politics is the art of the possible,”¹⁴⁹ a pragmatic solution that is likely to succeed is the best course of action. While interest groups often want to roll out their

most ambitious legislative agenda, believing as they do in their cause, it can be more damaging to attempt sweeping legislation and fail than to begin a process of incremental change.

While PAs have much to offer in delivering primary care in Puerto Rico, particularly with an emphasis on chronic disease management and prevention, the territory of primary care is currently occupied by the *generalistas*, who can be expected to be viscerally opposed to the implementation of PAs. Further, there is pending legislation for nurse practitioners, and their goal is to practice in primary care. If PAs attempt to occupy their historical primary care niche within Puerto Rico, they will likely become embroiled in a turf war between the *generalistas* and NPs.

While the initial approach should be for PAs to assist with access to care in the subspecialties, entry into primary care is an important future goal. To that end, pilot projects on the island municipalities of Vieques and Culebra, and the mountain village of Castañer should be considered in the future.

In addition to the pilot project at UPR, the implementation plan includes a public relations campaign, with an education campaign and the hiring of a dedicated lobbyist. To further the profession's interests in full implementation of PAs, the AAPA should consider hiring a lobbyist. Discussion of the elements of the implementation plan follow; this overview is designed to serve as a guide, and the actual plan would be developed by the physician faculty and leadership at UPR.

- Pilot project utilizing PAs at the University of Puerto Rico Medical Center, in the medical and surgical specialties.
- Outcome measures to evaluate the success of the project, and provide evidence for expanding utilization of PAs across the island.

- A public relations campaign targeted at physicians and legislators
- An advocacy effort, including a dedicated lobbyist located in San Juan

Pilot project structure and implementation

The pilot project could initially include the following disciplines at the medical center: general surgery, orthopedic surgery, neurosurgery, and the internal medical subspecialties. The choice of these specialties is intentional, as is the exclusion of others.

All the proposed sections and departments are located at the UPR campus in Río Piedras, making it possible to enact a local law limited to this site. Physician assistants have been successfully and widely deployed in these disciplines on the mainland, and this evidence can be provided in support of the proposal.

Other disciplines, which often utilize PAs in the states, should be initially avoided, for various reasons. Emergency medicine, for example, while experiencing shortages in the island,¹⁵⁰ is not located at Río Piedras, and the idea of non-physicians in the emergency setting may evoke frightening images for legislators unfamiliar with PAs—despite the fact that most “emergency services” in the island are provided by *generalistas* at sites distant to the medical center, and despite the fact that PAs are widely and successfully utilized in emergency care in the states. Obstetrics and gynecology is occupied “below the radar” by nurse midwives, a potential turf battle, and PAs are not widely used in the discipline in the states.

Implementing the pilot project through a local law which limits utilization of PAs to the UPR site in Río Piedras offers the advantage of avoiding a potential controversy with the *generalistas* and the NPs. Although these groups may oppose a proposal on

general principles, they will have a difficult time arguing that PAs will impinge on their domains of practice.

The full AAPA model law is provided in Appendix I, and a proposed local law specifically for this project is provided in Appendix J. The legislative language in the local law is crafted to allow the fullest utilization of PAs, including delegated prescribing, and is designed to provide nearly full implementation on enactment, in hopes of avoiding the opportunity for regulatory mischief by opponents, and limiting the need to add extra functions to the TEM. The proposed legislative language does require that the PA hold an unrestricted license in another state.

Evaluation and outcome measures

Measuring the success of the pilot project will be critically important. A number of quantitative measures might be used to assess the effects of PA utilization on cost, quality, numbers of patients seen, and patient satisfaction, for example.

Qualitative approaches should also be utilized, to learn about challenges and successes at the personal and sociological levels. Individual interviews with supervising physicians, PAs, patients and administrators could also provide rich information about the process of implementation and acceptance. This data could be used to inform the design of future survey research, predict opposition and enhance future expansion projects' success on the island. It will also be useful to learning about the sociology of implementing PA-like roles in Latin America, which is the last area of the world where this is not spontaneously occurring.

Public relations campaign

The public relations campaign requires considerable resources, and the AAPA has made a commitment to providing the needed funding. At the “Puerto Rico Summit” convened by the AAPA at the organization’s annual conference in San Antonio in May 2008, the Puerto Rico Special Interest Group and the State Government Affairs staff of AAPA agreed to a focused campaign to include these recommendations.

The education campaign should be targeted at legislators and physicians who are unfamiliar with PAs. All materials should be in Spanish, culturally appropriate, and feature Puerto Rican physicians, PAs and patients. The central product in this campaign should be two or three high quality, short DVDs in Spanish, narrated by a Puerto Rican physician (perhaps in New York) who utilizes PAs and delineates their benefits to his or her practice and patients. Public relations materials should be professionally produced and graphically engaging, with a minimum of text. Selected white papers already created by the AAPA should be professionally translated into Spanish and made available as well.

Materials can be provided to legislators by the dedicated lobbyist and other advocates. A web site should be created featuring both the DVDs and written materials in printable form. Consideration should be given to posting the videos on YouTube. The public relations materials may also be published in the medical and health administration literature in Puerto Rico, including the medical association and hospital association journals.

These materials will be created and disseminated by the American Academy of Physician Assistants, which has already begun the process by creating a print advertisement for publication in the hospital association journal, see Appendix H.

Patient education materials about PAs should also be created in Spanish, reviewed with key contacts in Puerto Rico, and made available to the clinical practices participating in the pilot project.

Dedicated lobbyist

The complexity of politics in Puerto Rico requires a lobbyist in San Juan dedicated to this effort. The challenge will lie in finding a lobbyist who does not carry unwanted political baggage by past high-profile association with a political party, or damaging prior battles in the legislative arena. Ideally, the PA lobbyist will be an “elder statesman,” highly regarded by legislators and physicians, someone seen as “above the fray.”

In addition to the lobbyist, it will be important to identify three or four physicians who are highly regarded and willing to testify in support of PAs. These physicians should be from the UPR, other institutions and public health. Puerto Rican PAs, fluent in Spanish even if they do not live in Puerto Rico, with impeccable credentials and excellent verbal skills should also be identified to testify at legislative hearings.

It will be critical to assure that the pilot project has the endorsement of a representative from every major party. The lobbyist will utilize the public relations materials described above in conversations with legislators and other key decision makers. Arguments against the PA pilot project by opponents from the Colegio,

generalistas and organized nursing should be anticipated, and talking points created to refute them.

Future projects in Puerto Rico

After the initial pilot project at the UPR is successfully launched, and once outcome data is available demonstrating the positive impact of utilizing PAs, further pilot projects should be proposed in primary care, in the outlying rural island municipalities of Vieques and Culebra, and the mountain village of Castañer. These proposed pilots should follow the advocacy model utilized to achieve the project at the UPR, and planning for evaluation should include primary care outcome measures, which are readily available from the National Committee on Quality Assurance (NCQA), Medicare and other agencies.

Significance and potential application to other professions and locales

This study has considered the physician assistant profession and its attempts to achieve enabling legislation in Puerto Rico. But other professions may have similar struggles, and there may be useful lessons that can be applied more widely. Dental hygienists attempting to perform some of the basic functions of dentistry in Alaska and Minnesota, genetic counselors seeking licensing laws in various states, dialysis technicians in Puerto Rico—all make claims for part of a dominant profession's practice jurisdiction. Several principles for success can be drawn from the findings of this study.

The history, politics and culture of the locale must be understood as fully as possible. The actions of both proponents and antagonists will only make sense in context, making it possible to select actions more likely to lead to success. Further, understanding of the history, politics and culture of the dominant profession is crucial. Because

profession is identity, not just livelihood, decisions about acceptance or rejection of new claimants for jurisdiction are emotional and visceral. While antagonists will voice logical arguments for rejecting claimants, the real meaning, and reasons for that rejection, will lie below the surface of professional discourse.

Incremental change will more likely lead to success over the long term. New professions often unite in excitement for revolutionary change, believing in their cause and citing logical arguments. Physician assistants have made a commitment to incremental change over the course of their four decades of existence, taking a stance of cooperation rather than confrontation—a “strategic adaptation”¹⁵¹ that has served the profession well. First functioning under a “delegatory clause,” then seeking registration, then licensing, then delegated prescribing, resulted in enabling legislation and full delegated prescribing privileges in all states and nearly all territories of the US.

The following are necessary generalized elements which will lead to successful introduction of a new profession, based on the PA experience:

- A societal need
- Influential champions from the dominant profession
- Individual champions from the dominant profession who persuade consumers to accept the new professional
- Politically savvy and energetic advocates within the new profession
- Adequate resources to fund efforts beyond “grass roots”
- A critical mass of members of the new profession

PAs were successfully implemented because they helped meet a societal need for improved access to health care. Physician champions such as Eugene A. Stead, Chairman

of the Department of Medicine at Duke University, carried the concept forward despite objections from many within the medical profession. As PAs were implemented in medical practices, they were endorsed by the individual physicians who employed them, resulting in high levels of patient acceptance documented in health services research less than 20 years after their introduction.²⁰ Across the states, individual PAs lobbied for enabling legislation, and achieved incremental change through ongoing efforts. The AAPA and state PA associations developed a revenue stream through continuing education conferences, and used these resources to fund professional lobbying efforts at both the state and federal levels. From initially small numbers, PAs grew to nearly 70,000 in 2008.

More adversarial and revolutionary approaches may yield success, but incremental change aimed at filling a societal need is well received by legislators. Advocacy by the dominant profession at the leadership and individual levels is crucial, particularly in the early years when the profession's numbers are small. Achieving a critical mass is important because a profession with only a few members will have difficulty raising the needed resources and identifying politically talented individuals to lobby at the grass roots level.

Internationally, there is a shortage of many health care professionals, and increasing discussion of the need for "task shifting" to allow more complex medical acts to be performed by non-physicians. From the *técnicos de medicina* in Mozambique and similar professional roles across Africa, to the introduction of physician assistants in the United Kingdom, Europe, Canada, Australia, and India, the boundaries of medical practice jurisdiction are changing. The lessons learned from this study may inform future

efforts to increase access to care through task shifting, particularly in Latin America, the last area of the globe to see implementation of a PA-like role.

Implications for future research

The division of labor in health care is not static. Dominant professions are challenged by incursions, or create new occupations to which they delegate tasks when their jurisdictions become too large. A dominant profession may resist ceding jurisdiction by marginalizing new claimants, or creating legal roadblocks to their implementation.¹⁵¹ The discourse of resistance reveals the meaning beneath these struggles for identity and control.

This dissertation provides a window on the division of labor in health care in Puerto Rico, and the views of those who would implement or resist the sharing of jurisdiction with a new profession, the PA. These perspectives are inextricably woven into the sociopolitical and cultural context of Puerto Rico. Language and emotion are critical to fully understanding acceptance or resistance. Qualitative research that looks in depth at this discourse offers great promise for understanding changes in the ecology of professional domains.

Appendix A1

Telephone and E-mail Scripts - English

Telephone Script – In-person Interview

Good morning [afternoon]. My name is Justine Strand. I am a doctoral candidate in public health at the University of North Carolina. For my dissertation, I am interviewing leaders in medicine and health services in Puerto Rico. My research concerns “physician assistants” and the possibility of licensing them in Puerto Rico. Would it be possible to make an appointment to interview [you, or name]?

I will be in Puerto Rico [or San Juan, or Bayamón, etc] [state dates]. The interview would take about 30 minutes. I would very much appreciate the opportunity to interview [you, or name].

E-mail Script – In-person Interview

Subject line: Request for interview

I am a doctoral candidate in public health at the University of North Carolina. For my dissertation, I am interviewing leaders in medicine and health services in Puerto Rico. My research concerns “physician assistants” and the possibility of licensing them in Puerto Rico. Would it be possible to make an appointment to interview [you, or name]?

I will be in Puerto Rico [San Juan, or Bayamón, etc] [state dates]. The interview would take about 30 minutes. I would very much appreciate the opportunity to interview [you, or name].

Telephone Script – Telephone Interview

Good morning [afternoon]. My name is Justine Strand. I am a doctoral candidate in public health at the University of North Carolina. For my dissertation, I am interviewing leaders in medicine and health services in Puerto Rico. My research concerns “physician assistants” and the possibility of licensing them in Puerto Rico. Would it be possible to make an appointment to interview [you, or name] by telephone? The interview would take about 30 minutes. I would very much appreciate the opportunity to interview [you, or name].

E-mail Script – Telephone Interview

Subject line: Request for interview

I am a doctoral candidate in public health at the University of North Carolina. For my dissertation, I am interviewing leaders in medicine and health services in Puerto Rico. My research concerns “physician assistants” and the possibility of licensing them in Puerto Rico. Would it be possible to make an appointment to interview [you, or name] by telephone? The interview would take about 30 minutes. I would very much appreciate the opportunity to interview [you, or name].

Appendix A2

Telephone and E-mail Scripts – Spanish

Guión telefónico – Entrevista en persona

Buenos días [Buenas tardes]. Mi nombre es Justine Strand. Soy una estudiante del doctorado en salud pública de la Universidad de Carolina del Norte. Para mi tesis, estoy entrevistando a líderes en el campo de la medicina y los servicios de salud en Puerto Rico. El tema de la entrevista tiene que ver con los “physician assistants” y la posibilidad de autorizarles a ejercer en Puerto Rico. ¿Sería posible concertar una cita para entrevistarle/entrevistarla [o nombre]?

Estaré en Puerto Rico [o San Juan, o Bayamón, etc.] [especifique las fechas]. La entrevista tomará cerca de 30 minutos. Le estaría muy agradecida si me da la oportunidad de entrevistarle/entrevistarla [o nombre].

Guión por correo electrónico – Entrevista en persona

Asunto: Solicitud de entrevista

Soy una estudiante del doctorado en salud pública de la Universidad de Carolina del Norte. Para mi tesis, estoy entrevistando a líderes en el campo de la medicina y los servicios de salud en Puerto Rico. El tema de la entrevista tiene que ver con los “physician assistants” y la posibilidad de autorizarles a ejercer en Puerto Rico. ¿Sería posible concertar una cita para entrevistarle/entrevistarla [o nombre]?

Estaré en Puerto Rico [o San Juan, o Bayamón, etc.] [especifique las fechas]. La entrevista tomará cerca de 30 minutos. Le estaría muy agradecida si me da la oportunidad de entrevistarle/entrevistarla [o nombre].

Guión telefónico – Entrevista telefónica

Buenos días [Buenas tardes]. Mi nombre es Justine Strand. Soy una estudiante del doctorado en salud pública de la Universidad de Carolina del Norte. Para mi tesis, estoy entrevistando a líderes en el campo de la medicina y los servicios de salud en Puerto Rico. El tema de la entrevista tiene que ver con los “physician assistants” y la posibilidad de autorizarles a ejercer en Puerto Rico. ¿Sería posible concertar una cita para entrevistarle/entrevistarla [o nombre] por teléfono? La entrevista tomará cerca de 30 minutos. Le estaría muy agradecida si me da la oportunidad de entrevistarle/entrevistarla [o nombre].

Guión por correo electrónico – Entrevista telefónica

Asunto: Solicitud de entrevista

Soy una estudiante del doctorado en salud pública de la Universidad de Carolina del Norte. Para mi tesis, estoy entrevistando a líderes en el campo de la medicina y los servicios de salud en Puerto Rico. El tema de la entrevista tiene que ver con los “physician assistants” y la posibilidad de autorizarles a ejercer en Puerto Rico. ¿Sería posible concertar una cita para entrevistarle/entrevistarla [o nombre] por teléfono? La entrevista tomará cerca de 30 minutos. Le estaría muy agradecida si me da la oportunidad de entrevistarle/entrevistarla [o nombre].

Appendix B1

Consent Form – English

Principal Investigator: Justine Strand, MPH, PA-C

Phone number: 919-681-0860, 919-730-9859

Email Address: justine.strand@duke.edu

Faculty Advisor: Thomas C. Ricketts, PhD, MPH

Phone number: 919-966-5541

Email Address: ricketts@schsr.unc.edu

You are being asked to take part in this research study because you are involved in health care planning and/or delivery in Puerto Rico. Your participation is voluntary. Please read this consent form carefully and take your time making your decision. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

Ms. Strand will conduct this study as part of her doctoral dissertation in public health at the University of North Carolina. This study is funded in part by the Josiah Charles Trent Memorial Foundation, Inc.

WHY IS THIS STUDY BEING DONE?

The purpose of the study is to learn about the potential for achieving a law allowing physician assistants to work in the Commonwealth of Puerto Rico.

Physician assistants (PAs) are health care professionals licensed to practice medicine with physician supervision. As part of their responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and in virtually all states can write prescriptions. Within the physician-PA relationship, physician assistants exercise autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services. All states plus the District of Columbia, the Commonwealth of the Northern Mariana Islands, Guam and the United States Virgin Islands have laws or regulations authorizing PA practice.

You are being asked to participate in this study because you are involved in planning for or delivering health care in the Commonwealth of Puerto Rico.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

About 25 people will be interviewed for this study.

WHAT IS INVOLVED IN THE STUDY?

If you agree to be in this study, you will be asked to sign this consent form. During the interview, you will be asked to reflect on the possibility of allowing physicians in Puerto Rico to delegate medical acts, tasks and functions to physician assistants. You will be asked to discuss whether enabling legislation should be enacted to allow physician assistants to work in Puerto Rico. You will be asked to discuss barriers to enacting this legislation, and any ideas you may have for strategies to achieve it.

With your consent, this interview will be tape recorded. It will later be transcribed, and the recording will be destroyed. The interview documents will be kept on a password-protected computer and in a locked file cabinet.

Some direct quotes from participants may be retained, but they will not be attributed to individuals. It is possible that persons interviewed could be identified despite not being identified in my final dissertation, due to their leadership positions in health care in Puerto Rico.

HOW LONG WILL THIS STUDY TAKE?

The interview will take about 30 minutes.

WHAT ARE THE RISKS OF THE STUDY?

The risks associated with this study are minimal since you will not be asked questions of a sensitive nature, and your responses will be kept confidential. You will have the right to refuse to answer any question or stop the interview at any time. There may be uncommon or previously unknown risks.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

You will probably not benefit by taking part in the study. It is hoped that more will be learned about barriers and facilitating factors for enacting enabling legislation for physician assistants in Puerto Rico.

WHAT ALTERNATIVES ARE THERE TO PARTICIPATION IN THIS STUDY?

You may refuse to participate in this study.

WILL MY INFORMATION BE KEPT PRIVATE?

The study director would like to tape record the interview to more completely and accurately capture your comments and ideas. If you wish to stop the interview, you may do so at any time without penalty. The recording of your interview will be transcribed, and then the recording will be destroyed. The interview document will be used to code responses from all interviews and identify common themes. The document will be kept on a password-protected computer, and also held in hard copy in a locked file cabinet.

WHAT ARE THE COSTS?

There will be no costs for being in the study, except for your time.

WHAT ABOUT COMPENSATION?

No payment will be made for participation in the interview.

WHAT ABOUT MY RIGHTS TO DECLINE PARTICIPATION OR WITHDRAW FROM THE STUDY?

You may refuse to participate in this study, and you may withdraw your consent to be interviewed at any time during the interview.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study, contact Ms. Justine Strand at 919-681-0860 during regular business hours and at 919-730-9859 after hours and on weekends and holidays. You may also contact Ms. Strand by e-mail at justine.strand@duke.edu.

For questions about your rights as a research participant, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111, and/or the University of North Carolina at Chapel Hill Office of Human Research Ethics at (919) 966-3113.

Appendix B2

Consent Form - Spanish

Investigadora Principal: Justine Strand, MPH, PA-C

Teléfono: 919-681-0860, 919-730-9859

Correo electrónico: justine.strand@duke.edu

Asesor de facultad: Thomas C. Ricketts, PhD, MPH

Teléfono: 919-966-5541

Correo electrónico: ricketts@schsr.unc.edu

Se le ha invitado a participar en este estudio de investigación puesto que está involucrado(a) en la planificación o suministro de servicios de salud en Puerto Rico. Su participación es voluntaria. Sírvase leer atentamente este formulario de consentimiento y tómese su tiempo antes de decidir. A continuación se describen la naturaleza, los riesgos, los inconvenientes, las molestias y otra información importante acerca del estudio.

Este estudio, financiado en parte por la Josiah Charles Trent Memorial Foundation, Inc., estará a cargo de la Sra. Justine Strand como parte de su tesis doctoral en salud pública en la University of North Carolina (Universidad de Carolina del Norte).

¿POR QUÉ SE ESTÁ REALIZANDO ESTE ESTUDIO?

El propósito del estudio es explorar la posibilidad de que se apruebe una ley que permita a los “physician assistants” trabajar en el Estado Libre Asociado de Puerto Rico.

Los “physician assistants” son profesionales de la salud con licencia para practicar la medicina bajo la supervisión de un médico. Entre sus responsabilidades se incluyen: realizar exámenes físicos, diagnosticar y tratar enfermedades, ordenar e interpretar exámenes, asesorar sobre atención médica preventiva, asistir en operaciones quirúrgicas y, en la gran mayoría de los estados, recetar. Dentro del marco de la relación médico-“physician assistant”, estos últimos gozan de autonomía con respecto a la toma de decisiones médicas y brindan una amplia gama de servicios diagnósticos y terapéuticos. En todos los estados, incluyendo al Distrito de Columbia, al Estado Libre Asociado de las Islas Marianas del Norte, a Guam y las Islas Vírgenes de Estados Unidos, existen leyes o regulaciones que autorizan a los “physician assistants” a ejercer la medicina.

Se le ha invitado a participar en este estudio puesto que está involucrado(a) en la planificación o suministro de servicios de salud en el Estado Libre Asociado de Puerto Rico.

¿CUÁNTAS PERSONAS PARTICIPARÁN EN ESTE ESTUDIO?

Alrededor de 25 personas serán entrevistadas para este estudio.

¿QUÉ INVOLUCRA EL ESTUDIO?

Si acepta participar en este estudio, se le pedirá que firme este documento de consentimiento. Durante la entrevista, se le pedirá que reflexione sobre la posibilidad de que en Puerto Rico se permita a los médicos delegar acciones, tareas y funciones de índole médica a los “physician assistants”. Se le pedirá que discuta acerca de si debería promulgarse una legislación habilitante que autorice a los “physician assistants” a trabajar en Puerto Rico. Se le pedirá que discuta sobre las barreras que existen para aprobar dicha legislación y que aporte cualquier idea que pueda tener para formular estrategias que ayuden a lograrla.

Con su consentimiento, esta entrevista será grabada. Luego se hará una transcripción y la grabación será destruida. Los documentos de la entrevista se guardarán en una computadora protegida por contraseña y en un archivo bajo llave.

Es posible que se conserven algunas citas textuales de los participantes; sin embargo, éstas no serán atribuidas a alguna persona en particular. Puede que ciertas personas entrevistadas sean identificadas (a pesar de que no las mencione directamente en mi tesis final) debido a los puestos de liderazgo que ocupan en el sector de la salud de Puerto Rico.

¿CUÁNTO TIEMPO TARDARÁ ESTE ESTUDIO?

La entrevista tiene una duración aproximada de 30 minutos.

¿CUÁLES SON LOS RIESGOS DEL ESTUDIO?

Los riesgos asociados con este estudio son mínimos puesto que no se le harán preguntas personales y sus respuestas se mantendrán confidenciales. Usted tendrá el derecho de negarse a contestar cualquier pregunta o de suspender la entrevista en cualquier momento. Puede haber riesgos poco frecuentes o desconocidos.

¿OBTENDRÉ ALGÚN BENEFICIO POR PARTICIPAR EN EL ESTUDIO?

Probablemente usted no se beneficiará por participar en el estudio. Se espera aprender más acerca de las barreras que impiden la promulgación de leyes que habiliten a los “physician assistants” en Puerto Rico y de los factores que podrían facilitarlas.

¿QUÉ ALTERNATIVAS HAY A LA PARTICIPACIÓN EN ESTE ESTUDIO?

Usted puede negarse a participar en este estudio.

¿SE MANTENDRÁ MI INFORMACIÓN EN PRIVADO?

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¿CUÁL ES EL COSTO?

No hay ningún costo, con excepción del tiempo que haya invertido.

¿EXISTE ALGUNA COMPENSACIÓN?

No se realizarán pagos por participar en la entrevista.

¿TENGO DERECHO A NEGARME A PARTICIPAR O A ABANDONAR EL ESTUDIO?

Usted puede negarse a participar en este estudio y, durante la entrevista, puede retirar su consentimiento en cualquier momento.

¿A QUIÉN DEBO LLAMAR SI TENGO PREGUNTAS O INCONVENIENTES?

Para preguntas acerca del estudio, puede comunicarse con la Sra. Justine Strand, llamando al 919-681-0860 durante el horario laboral y al 919-730-9859 fuera del horario laboral, durante los fines de semana y los días festivos. También puede comunicarse con la Sra. Justine Strand escribiendo un correo electrónico a justine.strand@duke.edu.

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Appendix C1

Information Sheet – English

Information About a Research Study

Principal Investigator: Justine Strand, MPH, PA-C

Phone number: 919-681-0860, 919-730-9859

Email Address: justine.strand@duke.edu

Faculty Advisor: Thomas C. Ricketts, PhD, MPH

Phone number: 919-966-5541

Email Address: ricketts@schsr.unc.edu

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The purpose of the study is to learn about the potential for achieving a law allowing physician assistants to work in the Commonwealth of Puerto Rico.

Physician assistants (PAs) are health care professionals licensed to practice medicine with physician supervision. As part of their responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and in virtually all states can write prescriptions. Within the physician-PA relationship, physician assistants exercise autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services. All states plus the District of Columbia, the Commonwealth of the Northern Mariana Islands, Guam and the United States Virgin Islands have laws or regulations authorizing PA practice.

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About 25 people will be interviewed for this study.

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Some direct quotes from participants may be retained, but they will not be attributed to individuals. It is possible that persons interviewed could be identified despite not being identified in my final dissertation, due to their leadership positions in health care in Puerto Rico.

HOW LONG WILL THIS STUDY TAKE?

The interview will take about 30 minutes.

WHAT ARE THE RISKS OF THE STUDY?

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Appendix C2

Information Sheet – Spanish

Información Sobre un Estudio de Investigación

Investigadora Principal: Justine Strand, MPH, PA-C

Teléfono: 919-681-0860, 919-730-9859

Correo electrónico: justine.strand@duke.edu

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Los “physician assistants” son profesionales de la salud con licencia para practicar la medicina bajo la supervisión de un médico. Entre sus responsabilidades se incluyen: realizar exámenes físicos, diagnosticar y tratar enfermedades, ordenar e interpretar exámenes, asesorar sobre atención médica preventiva, asistir en operaciones quirúrgicas y, en la gran mayoría de los estados, recetar. Dentro del marco de la relación médico-“physician assistant”, estos últimos gozan de autonomía con respecto a la toma de decisiones médicas y brindan una amplia gama de servicios diagnósticos y terapéuticos. En todos los estados, incluyendo al Distrito de Columbia, al Estado Libre Asociado de las Islas Marianas del Norte, a Guam y las Islas Vírgenes de Estados Unidos, existen leyes o regulaciones que autorizan a los “physician assistants” a ejercer la medicina.

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¿CUÁNTAS PERSONAS PARTICIPARÁN EN ESTE ESTUDIO?

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¿QUÉ INVOLUCRA EL ESTUDIO?

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Con su consentimiento, esta entrevista será grabada. Luego se hará una transcripción y la grabación será destruida. Los documentos de la entrevista se guardarán en una computadora protegida por contraseña y en un archivo bajo llave.

Es posible que se conserven algunas citas textuales de los participantes; sin embargo, éstas no serán atribuidas a alguna persona en particular. Puede que ciertas personas entrevistadas sean identificadas (a pesar de que no las mencione directamente en mi tesis final) debido a los puestos de liderazgo que ocupan en el sector de la salud de Puerto Rico.

¿CUÁNTO TIEMPO TARDARÁ ESTE ESTUDIO?

La entrevista tiene una duración aproximada de 30 minutos.

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¿OBTENDRÉ ALGÚN BENEFICIO POR PARTICIPAR EN EL ESTUDIO?

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¿QUÉ ALTERNATIVAS HAY A LA PARTICIPACIÓN EN ESTE ESTUDIO?

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¿SE MANTENDRÁ MI INFORMACIÓN EN PRIVADO?

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¿CUÁL ES EL COSTO?

No hay ningún costo, con excepción del tiempo que haya invertido.

¿EXISTE ALGUNA COMPENSACIÓN?

No se realizarán pagos por participar en la entrevista.

¿TENGO DERECHO A NEGARME A PARTICIPAR O A ABANDONAR EL ESTUDIO?

Usted puede negarse a participar en este estudio y, durante la entrevista, puede retirar su consentimiento en cualquier momento.

¿A QUIÉN DEBO LLAMAR SI TENGO PREGUNTAS O INCONVENIENTES?

Para preguntas acerca del estudio, puede comunicarse con la Sra. Justine Strand, llamando al 919-681-0860 durante el horario laboral y al 919-730-9859 fuera del horario laboral, durante los fines de semana y los días festivos. También puede comunicarse con la Sra. Justine Strand escribiendo un correo electrónico a justine.strand@duke.edu.

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Appendix D1

Interview Questions: English	
ID	What is your discipline? What is your current position?
1.	Tell me the first words that come to your mind when you hear the term "physician assistant."
2.	Physician assistants practice medicine with physician supervision in all U.S. states and territories except Samoa and Puerto Rico. What are your thoughts about <u>legally authorizing physician assistants to practice in Puerto Rico</u> ?
	Follow-up: What role could "physician assistants" play in Puerto Rico?
3.	What do you think about the level of health care provided by physician assistants?
4.	What might be some barriers to enacting legislation allowing physician assistants to practice in Puerto Rico?
5.	What kinds of tasks might be appropriate for physician assistants?
	What about prescribing?
6.	Where do you think physician assistants could be useful in Puerto Rico?
7.	What might make legislation to allow PA practice more likely?
8.	What is your assessment of access to health care in Puerto Rico?
9.	Are there enough doctors in Puerto Rico?
10.	Please tell me about organized medicine in Puerto Rico.
11.	Are there differences between Puerto Rico and the mainland United States with respect to the practice of medicine?
12.	Do you have any other thoughts about the possible use of PAs in Puerto Rico?

Appendix D2

Interview Questions: Spanish Preguntas de la entrevista	
ID	¿Cuál es su disciplina? ¿Cuál es su cargo actual?
1.	Dígame las primeras palabras que le vienen a la mente cuando escucha el término “physician assistant”.
2.	Los “physician assistants” ejercen la medicina bajo la supervisión de un médico en todos los estados y territorios de Estados Unidos, con excepción de Samoa y Puerto Rico. ¿Qué piensa usted acerca de aprobar una ley que autorice a los “physician assistants” a ejercer en Puerto Rico?
	Seguimiento: ¿Qué papel podrían desempeñar los “physician assistants” en Puerto Rico? [∇]
3.	¿Qué piensa usted acerca del nivel de atención de salud brindado por los “physician assistants”?
4.	¿Cuáles podrían ser algunas de las barreras a la aprobación de una legislación que permita a los “physician assistants” ejercer en Puerto Rico?
5.	¿Qué tipo de tareas podrían resultar apropiadas para los “physician assistants”?
	¿Qué hay acerca de recetar?
6.	¿Dónde piensa usted que los “physician assistants” podrían ser de utilidad en Puerto Rico?
7.	¿Qué podría contribuir a facilitar la aprobación de una ley que permita a los “physician assistants” ejercer su profesión?
8.	¿Cuál es su evaluación del acceso a la atención de salud en Puerto Rico?
9.	¿Hay suficientes médicos en Puerto Rico?
10.	Hábleme acerca de la medicina organizada en Puerto Rico.
11.	¿Existen diferencias entre Puerto Rico y los Estados Unidos en cuanto a la práctica de la medicina?
12.	¿Tiene usted alguna otra observación acerca de la posibilidad de autorizar a los “physician assistants” a ejercer su profesión en Puerto Rico?

[∇] Pregunta dirigida a los “physician assistants” entrevistados.

Appendix E

List of Codes: Output from Atlas.ti

Code-Filter: All

HU:	Puerto Rico diss
File:	[C:\Documents and Settings\stran006\Desktop\Puerto Rico diss Atlas.ti\Puerto Rico diss.hpr5]
Edited by:	Super
Date/Time:	08/26/08 05:21:49 PM

access geography: adequate
access: geography: barrier
access: waiting for care
Arbona system
Colegio
Colegio opposition
demi-gods
dirty work
disorganized medicine
doctors leaving PR
generalistas
generalistas opposition
health care costs
health policy "below the radar"
La Reforma
malpractice
medical clerks
nursing resistance
PA role understanding
patient acceptance
physician occupational prestige
physician supply and specialists: negative
physician supply: sufficiency
politics
prognosis bad
prognosis good
prognosis PA salary poor
reimbursement
strategies
substandard physicians
TEM
workforce distribution

Appendix F

Examples of codes and trigger words

Code	Trigger words
Access: geography: barrier	Travel Miles Public transportation Distribution
Access: geography: adequate	Distance Population Small Access
Patient acceptance	Attitude Trust Bata blanca (white coat)
Physician occupational prestige	Demi-gods (cross coded as demi gods) Mas alto (higher up) Niveles (levels) Specialists
Physician supply: sufficiency	Numbers: doctors, square miles Enough Suficientes

Appendix G

Sample Codes with Quotations

Code: access: geography: barrier {3-0}

P 3: 08-05-02XXX.doc - 3:2 [So now if you need to see some...] (9:9)
(Super)
Codes: [access: geography: barrier]

So now if you need to see somebody, it's not available in the area where they live, they basically have to travel to San Juan to get most of the health care. Now, it's a small island, it's only 100 miles by 35 miles, but when you talk about the public transportation system down there, then you understand that even though it's only at the most 100 miles far away, it's not that easy to get there.

P13: 08-24-01XXX.doc - 13:10 [La realidad es que es muy difi...] (86:86) (Super)
Codes: [access: geography: barrier]

La realidad es que es muy dificil accessar la cobierta por distintas razones. Los servicios no están distribuidos en la isla de la misma manera. No es lo mismo en que a la area rural, que la area urbana. Por que en la area rural hay pocos médicos. Hay pocos lugares donde buscar servicios. Por lo tanto, el acceso en la area rural es dificil, aunque la cobertura existe y tiene el sistema no puede llegar al servicio. Eso pasa mucho en la area rural

P19: 08-30-01XXX.doc - 19:8 [But here in Puerto Rico you ha...] (85:85) (Super)
Codes: [access: geography: barrier]

But here in Puerto Rico you have a lot of people very far out. And people cannot buy medications; they cannot even come down to the pharmacy. So they don't have anybody to take them to the major cities, and here the major part of the island is concentrated in San Juan, Ponce, Mayaguez.

Code: access: waiting for care {14-0}

P 2: 08-04-02XXX.doc - 2:3 [So I think there's just so muc...] (15:15) (Super)
Codes: [access: waiting for care]

So I think there's just so much, because right now patients take a day, at least, to get their care. They have a system of taxicabs they call publico, and those taxicabs take you say from the middle of the island say to San Juan, and in San Juan you have to go to the doctor's office, you don't get an appointment time, you wait all day, you have to bring your lunch because you can't go out for lunch or to get it because if they call you that's it, you've lost your turn.

P 3: 08-05-02XXX.doc - 3:10 [It's a huge problem, I don't k...] (77:77)
(Super)
Codes: [access: waiting for care]

It's a huge problem, I don't know if you got information on that, but your appointment is for 8:00 in the morning. And you basically bring your lunch, a book, pillows, because you may be there until 3:00 or 4:00 in the afternoon before you get seen. That's the standard of care there for appointments. For primary care and for specialty care. And the problem is the people are afraid to leave in case they get called in. If you leave, you lose your appointment and they have to reschedule you and you have to go through the whole thing all over again. So when you have a medical appointment there, you basically have to ask for the whole entire day off from work. There's no real appointment. Everybody comes in at the same time, and it's a first come, first served basis so you get a number and people are showing up all the same time. Your number may be 48, but it really doesn't matter. It's a whole day affair.

P 4: 08-22-01XXX.doc - 4:3 [You should go to the patients,...] (41:41)
(Super)
Codes: [access: waiting for care]

You should go to the patients, that they have to wait so long to be seen by a doctor.

P11: 08-24-01XXX.doc - 11:5 [There is an appointment schedu...] (31:31)
(Super)
Codes: [access: waiting for care]

There is an appointment schedule, but it doesn't work. Functionally, you know, you get seen 2 or 3 hours after you come in.

There is a big, big complaint about the waiting time here. People expect to be seen within a half hour of their appointment, and that is not happening. If you go, you sign up in the morning at 6 AM, you get put on the list, and then you wait.

P15: 08-29-01XXX.doc - 15:1 [Subscribers can't access provi...] (63:65)
(Super)
Codes: [access: waiting for care] (*notes, not digitally recorded*)

La Reforma subscribers can't access providers. Subject is a patient, had La Reforma, PCP never had open space, couldn't get appointment. After 6 months subject went back to private insurance.

P18: 08-30-0XXX.doc - 18:6 [Because we have a government p...] (45:45)
(Super)
Codes: [access: waiting for care]

Because we have a government paid health insurance program, access is basically guaranteed. But, when you have to wait weeks for an appointment for several types of medical practices, then you know . . .

JS: Do you believe there are enough doctors in Puerto Rico?

08-30-01XXX: No.

JS: Because most physicians tell me there are plenty.

08-30-01XXX: No. That is false. If that were true, why do people have to stand in line for 4 hours for every doctor's appointment? The other thing is that they don't give specific time appointments.

You have to spend half a day in order for one medical appointment. It is almost impossible, for example, for you in Puerto Rico, to in one day have all your annual tests done, and so forth. Because of scheduling problems. And if you have a scheduling problem, it's because they use the long lines as a way to ration services. If you were able to get instantaneous service, or near instantaneous service, you'd have more people using medical services and then would discover that in fact you don't have enough doctors to take care of people.

P19: 08-30-01XXX.doc - 19:4 [Like a person who has an urgen...] (73:73)
(Super)
Codes: [access: waiting for care]

Like a person who has an urgent need to see a physician, he has to come from his home, wherever it is, out in the country, come to the office, maybe he has to be there before 6 AM, to get a number, and if by a certain time the total numbers that the physician is going to see that day are out, he will not be seen. And so even though the health care could be good, it's not accessible in the moment of need.

And that's something, when a person has an emergency, goes to the hospital, but so many thousands of people have the same problem, and then you don't have beds. Some people are admitted in the hallways. Some people die in the hallways and nobody knows who they were.

P20: 08-30-01XXX.doc - 20:7 [So I don't think there are eno...] (63:63)
(Super)
Codes: [access: waiting for care]

So I don't think there are enough doctors. People wait too long. People get up at 2 and 3 in the morning to go to an office, sign a name, and wait until a physician, if that's his primary office, he will be there at maybe 7 or 8:00 in the morning.

P21: 08-31-01XXX.doc - 21:5 [This is an issue of access. In...] (87:87)
(Super)
Codes: [access: waiting for care] [La Reforma]

This is an issue of access. In addition to that, most of the population has what we name the tarjeta de salud, it's like a managed care organization in the states, and there are some private hospitals that don't take this insurance.

P23: 08-31-01XXX.doc - 23:2 [You may have to wait a few hou...] (37:37)
(Super)
Codes: [access: waiting for care]

You may have to wait a few hours to get the attention, yes, that's right.

Appendix H

AAPA Model Law

Model State Legislation for Physician Assistants

August 2005



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MODEL STATE LEGISLATION FOR PHYSICIAN ASSISTANTS

The model legislation reflects two principal concepts: that physician assistants (PAs) should be licensed to practice medicine with physician supervision and that PA scope of practice should be determined by supervising physicians.

Licensure is the most appropriate level of PA regulation in order to protect the public health and safety. Some states have been using a de facto licensing system; that is, permission to practice is dependent on presentation of appropriate qualifications and approval by the state regulatory agency. However, rather than calling this licensure, it has been called “certification” or “registration.”

Experts have defined state **certification** as regulation of the use of a specific occupational title; that is, it is illegal to use a professional title without state approval, but anyone may deliver the service if they refrain from using the protected title.

Registration creates an official list of persons. Registration presumes the existence of the right to engage in activity and makes it illegal to practice in a regulated occupation without being registered. It generally is not intended to assure the public of qualified practitioners.

The Pew Health Commission’s Taskforce on Health Care Workforce Regulation issued a report in December 1995 recommending, among other things, that the term “licensure” be used for state regulation of health professions. The taskforce stated that the term certification should be reserved for voluntary private sector programs that attest to the competency of individual health professionals. For PAs, such a system is administered by the National Commission on Certification of Physician Assistants (NCCPA).

Thus, to eliminate confusion between private and state certification, as well as to identify the true level of regulation, the American Academy of Physician Assistants (AAPA) recommends that state laws use the term “license.” The majority of state laws conform to this recommendation. More than three-quarters of states use licensure as the regulatory term for physician assistants; most of the others use the term “certification,” with a handful “registering” physician assistants.

The **model state legislation** proposes an administrative process in which a PA presents his or her credentials to a state regulatory agency and receives a license in return. The license is renewable, based on meeting state requirements. Obtaining a license should occur independently of a PA’s employment status. One analogy is a driver’s license — you get one before you buy a car so that you can start driving as soon as you’re ready. This system should be attractive to state licensing boards because it eliminates a lot of paperwork. Many of the early statutes either granted permission to physicians to utilize specific PAs or required PAs to submit all transcripts, test scores, references, etc., every time they changed employers or supervisors. Under such systems, PAs legally ceased to exist between jobs.

The model legislation does not propose that the regulatory authority approve or register supervising physicians. Any licensed physician (M.D. or D.O.) may supervise a PA unless the physician’s ability to supervise has been limited by specific disciplinary action.

The scope of PA practice under the model legislation is dependent on what the supervising physician wishes to delegate. This is consistent with the original concept of PA utilization and reflects a movement away from a regulatory micromanagement of physician-PA practices.

The model legislation allows physicians to delegate prescriptive authority, including controlled substances in Schedules II through V, as well as limited dispensing authority. Also included is language clarifying a PA's authority to request, receive, and distribute professional samples. Physician assistants who are delegated prescribers of controlled medications are required to register with the federal Drug Enforcement Administration.

It is stated quite clearly that a physician need not be physically on the premises as long as the PA and physician can contact one another easily. The details of supervision are left to the physician-PA team.

The "Optional Replacement Parts" are offered as substitutes for some of the provisions described above. If the delegatory system contained in the model legislation is not feasible, language is provided to give a licensing board more control over the supervising physician and PA. Two options (the more preferable presented first) are included. They would be inserted in place of the "Supervising Physician" section.

If a description of PA scope of practice must be included, an alternative section is proposed that is intended to discourage the development of lists of tasks. This optional replacement section would take the place of "Scope of Practice — Delegatory Authority," although it is recommended that the paragraph that describes PAs as agents of physicians be retained.

Locum tenens language is not necessary in the model legislation as the proposed licensure system allows for easy substitution of one licensed PA for another. However, if the "Practice Agreement" concept is included, then the recommended section on locum tenens may be needed. The definition of locum tenens should be inserted in the "Definitions" section and the rest of the locum tenens provision placed elsewhere in the bill.

The final set of optional replacement parts deals with the regulatory structure—control by a medical licensing board without PA input; a voting PA on the medical board; a separate PA board; and the most popular model, regulation by a medical board with a PA committee.

This model law was first drafted in 1991 and revised in 1994, 1998, 2001, 2002, 2004, and 2005 to reflect changes in the physician assistant program accrediting agencies and to incorporate other new provisions. The AAPA's government affairs staff is available to assist with revisions and additions as needed and to explain what and why the model bill contains what it does. We hope the ideas are clear and can be transformed into the appropriate style and format to be compatible with your existing state code.

August 2005

**AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS
MODEL STATE LEGISLATION — PHYSICIAN ASSISTANTS**

DEFINITIONS

“Physician assistant” means a health professional who meets the qualifications defined in this chapter and is licensed under this chapter to practice medicine with physician supervision.

“Board” means the Medical Licensing Board.

“Supervising physician” means an M.D. or D.O. licensed by the board who supervises physician assistants.

“Supervision” means overseeing the activities of, and accepting responsibility for, the medical services rendered by a physician assistant. The constant physical presence of the supervising physician is not required as long as the supervising physician and physician assistant are or can be easily in contact with each other by telecommunication.

QUALIFICATIONS FOR LICENSURE

Except as otherwise provided in this chapter, an individual shall be licensed by the board before the individual may practice as a physician assistant.

The board may grant a license as a physician assistant to an applicant who

- 1) submits an application on forms approved by the board;
- 2) pays the appropriate fee as determined by the board;
- 3) has successfully completed an educational program for physician assistants accredited by the Accreditation Review Commission on Education for the Physician Assistant or, prior to 2001, either by the Committee on Allied Health Education and Accreditation or the Commission on Accreditation of Allied Health Education Programs.
- 4) has passed the Physician Assistant National Certifying Examination administered by the National Commission on Certification of Physician Assistants;
- 5) is mentally and physically able to engage safely in practice as a physician assistant;
- 6) has no licensure, certification, or registration as a physician assistant under current discipline, revocation, suspension, or probation for cause resulting from the applicant’s practice as a physician assistant, unless the board considers such condition and agrees to licensure;
- 7) is of good moral character;
- 8) submits to the board any other information the board deems necessary to evaluate the applicant’s qualifications; and
- 9) has been approved by the board.

The board may also grant a license to an applicant who does not meet the educational requirement specified in subsection 3, but who passed the Physician Assistant National

Certifying Examination administered by the National Commission on Certification of Physician Assistants prior to 1986.

TEMPORARY LICENSE

A temporary license may be granted to an applicant who meets all the qualifications for licensure but is awaiting the next scheduled meeting of the board.

INACTIVE LICENSE

Any physician assistant who notifies the board in writing on forms prescribed by the board may elect to place his or her license on an inactive status. A physician assistant with an inactive license shall be excused from payment of renewal fees and shall not practice as a physician assistant. Any licensee who engages in practice while his or her license is lapsed or on inactive status shall be considered to be practicing without a license, which shall be grounds for discipline under section _____ of this Act. A physician assistant requesting restoration from inactive status shall be required to pay the current renewal fee and shall be required to meet the criteria for renewal as specified in section _____ of this Act.

RENEWAL

Each person who holds a license as a physician assistant in this state will, upon notification from the board, renew said license by

- 1) submitting the appropriate fee as determined by the board;
- 2) completing the appropriate forms; and
- 3) meeting any other requirements set forth by the board.

EXEMPTION FROM LICENSURE

Nothing herein shall be construed to require licensure under this Act of

- 1) a physician assistant student enrolled in a physician assistant educational program accredited by the Accreditation Review Commission on Education for the Physician Assistant;
- 2) a physician assistant employed in the service of the federal government while performing duties incident to that employment; or
- 3) technicians or other assistants or employees of physicians who perform physician delegated tasks but who are not rendering services as a physician assistant or identifying themselves as a physician assistant.

SCOPE OF PRACTICE — DELEGATORY AUTHORITY — AGENT OF SUPERVISING PHYSICIAN

Physician assistants practice medicine with physician supervision. Physician assistants may perform those duties and responsibilities, including the ordering, prescribing and dispensing, and administration of drugs and medical devices that are delegated by their supervising physician(s).

Physician assistants may provide any medical service that is delegated by the supervising physician when the service is within the PA's skills, forms a component of the physician's scope of practice, and is provided with supervision. A physician assistant may perform a task not within the scope of practice of the supervising physician as long

as the supervising physician has adequate training, oversight skills, and supervisory and referral arrangements to ensure competent provision of the service by the PA.

Physician assistants may pronounce death and may authenticate with their signature any form that may be authenticated by a physician's signature.

Physician assistants shall be considered the agents of their supervising physicians in the performance of all practice-related activities including, but not limited to, the ordering of diagnostic, therapeutic, and other medical services.

PRESCRIPTIVE AUTHORITY

A physician assistant may prescribe, dispense, and administer drugs and medical devices to the extent delegated by the supervising physician.

Prescribing and dispensing of drugs may include Schedule II through V substances as described in [the state controlled drug act] and all legend drugs.

All dispensing activities of physician assistants shall

- 1) comply with appropriate federal and state regulations; and
- 2) occur when pharmacy services are not reasonably available, or when it is in the best interest of the patient, or when it is an emergency.

Physician assistants may request, receive, and sign for professional samples and may distribute professional samples to patients.

Physician assistants authorized to prescribe and/or dispense controlled substances must register with the federal Drug Enforcement Administration [and any applicable state controlled substance regulatory authority].

SUPERVISION

Supervision shall be continuous but shall not be construed as necessarily requiring the physical presence of the supervising physician at the time and place that the services are rendered.

It is the obligation of each team of physician(s) and physician assistant(s) to ensure that the physician assistant's scope of practice is identified; that delegation of medical tasks is appropriate to the physician assistant's level of competence; that the relationship of, and access to, the supervising physician is defined; and that a process for evaluation of the physician assistant's performance is established.

SUPERVISING PHYSICIAN

A physician wishing to supervise a physician assistant must

- 1) be licensed in this state;
- 2) be free from any restriction on his or her ability to supervise a physician assistant that has been imposed by board disciplinary action;
- 3) maintain a written agreement with the physician assistant. The agreement must state that the physician will exercise supervision over the physician assistant in accordance with any rules adopted by the board and will retain professional and legal responsibility for the care rendered by the physician assistant. The agreement must be signed by the physician and the physician assistant and updated annually. The agreement must be kept on file at the practice site and made available to the board upon request.

SATELLITE SETTINGS

Nothing contained herein shall be construed to prohibit the rendering of services by a physician assistant in a setting geographically remote from the supervising physician.

EXCLUSIONS OF LIMITATIONS ON EMPLOYMENT

Nothing herein shall be construed to limit the employment arrangement of a physician assistant licensed under this Act.

VIOLATIONS

The board may, following the exercise of due process, discipline any physician assistant who

- 1) fraudulently or deceptively obtains or attempts to obtain a license;
- 2) fraudulently or deceptively uses a license;
- 3) violates any provision of this chapter or any regulations adopted by the board pertaining to this chapter or any other laws or regulations governing licensed health professionals or any stipulation or agreement of the board;
- 4) is convicted of a felony;
- 5) is a habitual user of intoxicants or drugs to such an extent that he or she is unable to safely perform as a physician assistant;
- 6) has been adjudicated as mentally incompetent;
- 7) is physically or mentally unable to engage safely in practice as a physician assistant;
- 8) is negligent in practice as a physician assistant or demonstrates professional incompetence;
- 9) violates patient confidentiality except as required by law;
- 10) engages in conduct likely to deceive, defraud, or harm the public;
- 11) engages in unprofessional or immoral conduct;
- 12) prescribes, sells, administers, distributes, orders, or gives away any drug classified as a controlled substance for other than medically accepted therapeutic purposes;
- 13) has committed an act of moral turpitude;
- 14) is disciplined or has been disciplined by another state or jurisdiction based upon acts or conduct similar to acts or conduct that would constitute grounds for disciplinary action as defined in this section;
- 15) fails to cooperate with an investigation conducted by the board;
- 16) represents himself or herself as a physician.

DISCIPLINARY AUTHORITY

The board, upon finding that a physician assistant has committed any offense described in section _____, may

- 1) refuse to grant a license;
- 2) administer a public or private reprimand;
- 3) revoke, suspend, limit, or otherwise restrict a license;
- 4) require a physician assistant to submit to the care or counseling or treatment of a physician or physicians designated by the board;

- 5) impose corrective measures;
 - 6) impose a civil penalty or fine;
 - 7) suspend enforcement of its finding thereof and place the physician assistant on probation with the right to vacate the probationary order for noncompliance;
- or
- 8) restore or reissue, at its discretion, a license and remove any disciplinary or corrective measure which it may have imposed.

IMPAIRED PHYSICIAN ASSISTANT PROGRAM

The board shall establish and administer a program for the rehabilitation of physician assistants whose competency is impaired due to the abuse of drugs or alcohol. The board may contract with any other state agency or private corporation to perform duties under this section. The program shall be similar to that available to other health professionals licensed in this state.

TITLE AND PRACTICE PROTECTION

Any person not licensed under this Act is guilty of a [felony or misdemeanor] and is subject to penalties applicable to the unlicensed practice of medicine if he or she

- 1) holds himself or herself out as a physician assistant;
- 2) uses any combination or abbreviation of the term “physician assistant” to indicate or imply that he or she is a physician assistant; or
- 3) acts as a physician assistant without being licensed by the board.

An unlicensed physician shall not be permitted to use the title of “physician assistant” or to practice as a physician assistant unless he or she fulfills the requirements of this [Act].

IDENTIFICATION REQUIREMENTS

Physician assistants licensed under this Act shall keep their license available for inspection at their primary place of business and shall, when engaged in their professional activities, identify themselves as a “physician assistant.”

PARTICIPATION IN DISASTER AND EMERGENCY CARE

A physician assistant licensed in this state or licensed or authorized to practice in any other U.S. jurisdiction or who is credentialed as a physician assistant by a federal employer who is responding to a need for medical care created by an emergency or a state or local disaster (not to be defined as an emergency situation which occurs in the place of one’s employment) may render such care that they are able to provide without supervision as it is defined in this section of law, or with such supervision as is available.

Any physician who supervises a physician assistant providing medical care in response to such an emergency or state or local disaster shall not be required to meet the requirements set forth in this section of law for a supervising physician.

No physician assistant licensed in this state or licensed or authorized to practice in other states of the United States who voluntarily and gratuitously, and other than in the ordinary course of employment or practice, renders emergency medical assistance shall be liable for civil damages for any personal injuries which result from acts or omissions by those persons in rendering emergency care which may constitute ordinary negligence.

The immunity granted by this section shall not apply to acts or omissions constituting gross, willful, or wanton negligence or when the medical assistance is rendered at any hospital, physician's office, or other health care delivery entity where those services are normally rendered. No physician who supervises a physician assistant voluntarily and gratuitously providing emergency care as described in this subsection shall be liable for civil damages for any personal injuries which result from acts or omissions by the physician assistant rendering emergency care.

RULE-MAKING AUTHORITY

The board shall promulgate, in accordance with the provisions of the [state] Administrative Procedures Act, all rules that are reasonable and necessary for the performance of the various duties imposed upon the board by the provisions of this Act, including but not limited to

- 1) setting licensure fees; and
- 2) establishing renewal dates.

OPTIONAL REPLACEMENT PARTS FOR MODEL LEGISLATION

SUPERVISING PHYSICIAN — PRACTICE AGREEMENT — OPTION 1

SUPERVISING PHYSICIAN

A physician wishing to supervise a physician assistant must

- 1) be licensed in this state;
- 2) notify the board of his intent to supervise a physician assistant;
- 3) submit a statement to the board that he will exercise supervision over

the physician assistant in accordance with any rules adopted by the board and that he will retain professional and legal responsibility for the care rendered by the physician assistant.

NOTIFICATION OF INTENT TO PRACTICE

A physician assistant licensed in this state, prior to initiating practice, will submit, on forms approved by the board, notification of such intent. Such notification shall include

1) the name, business address, and telephone number of the supervising physician(s); and

2) the name, business address, and telephone number of the physician assistant. A physician assistant will notify the board of any changes or additions in supervising physicians within _____ days.

SUPERVISING PHYSICIAN — PRACTICE AGREEMENT — OPTION 2

Any physician licensed in this state may apply to the board for permission to supervise a physician assistant. The application shall be jointly submitted by the physician and the physician assistant(s) and may be accompanied by a fee as determined by the board.

The joint application shall describe the manner and extent to which the physician assistant will practice and be supervised, including identification of additional licensed physicians who will supervise the physician assistant; the education, training, and experience of the primary supervisor and the physician assistant; and other such information as the board may require.

The board may approve, modify, or reject such applications.

Whenever it is determined that a physician or physician assistant is practicing in a manner inconsistent with the approval granted, the board may demand modification of the practice, withdraw approval of the practice agreement, or take other disciplinary action as defined in section _____ of this Act.

PHYSICIAN ASSISTANT SCOPE OF PRACTICE

The practice of a physician assistant shall include medical services within the education, training, and experience of the physician assistant that are delegated by the supervising physician.

Medical services rendered by physician assistants may include, but are not limited to

- 1) obtaining patient histories and performing physical examinations;
- 2) ordering and/or performing diagnostic and therapeutic procedures;
- 3) formulating a diagnosis;
- 4) developing and implementing a treatment plan;
- 5) monitoring the effectiveness of therapeutic interventions;
- 6) assisting at surgery;
- 7) offering counseling and education to meet patient needs; and
- 8) making appropriate referrals.

The activities listed above may be performed in any setting authorized by the supervising physician, including but not limited to: clinics, hospitals, ambulatory surgical centers, patient homes, nursing homes, and other institutional settings.

LOCUM TENENS PERMIT

The board may grant a locum tenens permit to any applicant who is licensed in the state. The permit may be granted by an authorized representative of the board. Such applications for locum tenens permits will be reviewed at the next scheduled board meeting. The maximum duration of a locum tenens permit is one year. The permit may be renewed annually on a date set by the board.

Definition: "Locum tenens means the temporary provision of services by a substitute provider."

REGULATORY OPTIONS

I. Regulation by the medical board

The state board of medical examiners shall administer the provisions of this Act under such procedures as it considers advisable and may adopt rules that are reasonable and necessary to implement the provisions of this Act.

II. Regulation by a PA board

To administer this Act, there is hereby established a Board of Physician Assistant Examiners. The board shall consist of five members appointed by the governor, each of whom shall be residents of this state, four of whom shall be physician assistants who meet the criteria for licensure as established by this Act, and one of whom shall be a licensed physician experienced in supervising physician assistants.

Initial appointments shall be made as follows:

- 1) two members shall be appointed for terms of four years;
- 2) one member shall be appointed for a term of three years;
- 3) one member shall be appointed for a term of two years; and
- 4) one member shall be appointed for a term of one year.

Each regular appointment thereafter shall be for a term of four years. Any vacant term shall be filled by the governor for the balance of the unexpired term. No member shall serve more than two consecutive four-year terms, and each member shall serve on the board until his or her successor is appointed.

While engaged in the business of the board, each member shall receive a per diem of \$_____ and shall also receive compensation for actual expenses paid in accordance with [other state regulations].

The board shall elect a chair and a secretary from among its members at the first meeting of each fiscal year. The board shall meet on a regular basis. A board meeting may be called, upon reasonable notice, at the discretion of the chair and shall be called at any time, upon reasonable notice, by a petition of three board members to the chair.

Powers and duties of the board shall include the following:

- 1) promulgation of all rules reasonable and necessary to implement the provisions of this Act;
- 2) review and approval or rejection of applications for licensure;
- 3) review and approval or rejection of applications for renewal;
- 4) issuance of all licenses;
- 5) denial, suspension, revocation, or other discipline of a licensee;
- 6) determination of the amount and collection of all fees.

III. Regulation by a medical board with a PA advisory committee

There is hereby created a physician assistant committee which shall review and make recommendations to the board regarding all matters relating to physician assistants that come before the board. Such matters shall include, but not be limited to

- 1) applications for licensure;
- 2) practice agreements (if applicable);
- 3) disciplinary proceedings;
- 4) renewal requirements; and
- 5) any other issues pertaining to the regulation and practice of physician assistants in this state.

Committee membership

The committee shall consist of three physician assistants, one physician experienced in supervising physician assistants, and one member of the board. All

committee members must be residents of this state and hold a license in good standing in their respective disciplines.

The chair of the committee shall be elected by a majority vote of the committee members.

Committee members shall receive reimbursement for time and travel expenditures [consistent with usual state practices].

Appointments

The physician assistant and supervising physician members of the committee shall be appointed by the governor. The board of medical examiners shall designate one member to serve on the board. All appointments shall be made within 60 days of the effective date of this Act. All appointments shall be for four-year terms, at staggered intervals. Members shall serve no more than two consecutive terms. Reappointments of the physician assistant and supervising physician members of the committee shall be made by the governor.

Meetings

The committee shall meet on a regular basis. A committee meeting may be called, upon reasonable notice, at the discretion of the chair and shall be called at any time, upon reasonable notice, by petition of three committee members to the chair.

IV. Adding a PA to the medical board

To assist in the administration of this Act, the governor shall appoint a licensed physician assistant to the board of medical examiners for a term of _____ years, [etc., in accordance with existing law]. The physician assistant member will have full voting privileges.

Appendix I

Proposed local law: University of Puerto Rico Medical Center

Draft

Local Law Authorizing Physician Assistant Practice as a Pilot Project Limited to the University of Puerto Rico Medical Center At Río Piedras

I. DEFINITIONS

“Physician assistant” means a health professional who meets the qualifications defined in this chapter and who practices with the supervision of a physician member of the medical staff of the University of Puerto Rico Medical Center at Río Piedras and is limited to practicing in the facilities of the University of Puerto Rico Medical Center at Río Piedras.

“Supervising physician” means a M.D. or D.O. licensed by the Puerto Rico Medical Board and who is a member of the medical staff of the University of Puerto Rico Medical Center at Río Piedras who supervises physician assistants.

“Supervision” means overseeing the activities of, and accepting responsibility for, the medical services rendered by a physician assistant. The constant physical presence of the supervising physician is not required so long as the supervising physician and physician assistant are or can be easily in contact with one another telecommunication.

II. QUALIFICATIONS FOR PHYSICIAN ASSISTANTS INCLUDED IN THE PILOT PROJECT

In order for a physician assistant to participate in the pilot project the physician assistant must:

- 1) have successfully completed an educational program for physician assistants accredited by the Accreditation Review Commission on Education for Physician Assistants, or prior to 2001, either by the Committee on Allied Health Education and Accreditation or the Commission on Accreditation of Allied Health Education Programs.
- 2) have passed the Physician Assistant National Certifying Examination administered by the National Commission on Certification of Physician Assistants;
- 3) certify that he or she is mentally and physically able to engage safely in practice as a physician assistant;
- 4) be licensed as a physician assistant in any U.S. jurisdiction;
- 5) be of good moral character;
- 6) be credentialed as a physician assistant by the appropriate credentialing body of the University of Puerto Rico Medical Center at Río Piedras.

III. EXEMPTIONS

This local law does not apply to:

- 1) a physician assistant student enrolled in a physician assistant educational program accredited by the Accreditation Review Commission on Education for the Physician Assistant;
- 2) a physician assistant employed in the service of the federal government while performing duties incident to that employment; or
- 3) technicians, other assistants or employees of physicians who perform physician delegated tasks but who are not rendering services as a physician assistant or identifying themselves as a physician assistant.

IV. SCOPE OF PRACTICE – DELEGATION AUTHORITY – AGENT OF SUPERVISING PHYSICIAN

Physician assistants practicing under this local law within this pilot project provide medical care with physician supervision. Physician assistants may perform those duties and responsibilities, including the ordering, dispensing, and administration of drugs and medical devices that are delegated by their supervising physician(s).

Physician assistants may provide any medical service which is delegated by the supervising physician when the service is within the PA's skills, forms a component of the physician's scope of practice, is provided with physician supervision as defined and which the PA is credentialed to provide by the appropriate credentialing body of the University of Puerto Rico Medical Center at Río Piedras.

Services rendered by physician assistants may include, but are not limited to

- 1) obtaining patient histories and performing physical examinations;
- 2) ordering and/or performing diagnostic and therapeutic procedures;
- 3) formulating a diagnosis;
- 4) developing and implementing a treatment plan;
- 5) monitoring the effectiveness of therapeutic interventions;
- 6) assisting at surgery;
- 7) offering counseling and education to meet patient needs; and
- 8) making appropriate referrals.

Physician assistants shall be considered the agents of their supervising physician in the performance of all practice-related activities including, but not limited to, the ordering of diagnostic, therapeutic, and other medical services.

V. PRESCRIPTION MEDICATIONS

A physician assistant may order, dispense, and administer drugs and medical devices to the extent delegated by the supervising physician. A physician assistant may write an order for a drug that is to be dispensed by a pharmacist to an out-patient if specifically authorized to do so in the physician assistant's credentialing document that is available to the pharmacist who is providing medications in an institution affiliated with the University of Puerto Rico Medical Center at Río Piedras.

Physician assistants may order, administer and dispense drugs included in Schedules II through V and all legend drugs.

VI. SUPERVISION

Supervision shall be continuous but shall not be construed as necessarily requiring the physical presence of the supervising physician at the time and place that the services are rendered.

It is the obligation of each team of physician(s) and physician assistant(s) to ensure that physician assistant's scope of practice is identified; and delegation of medical tasks is appropriate to the physician assistant's level of competence; that the relationship of, and access to, the supervising physician is defined; and that a process for evaluation of the physician assistant's performance is established. All physician assistants and supervising physicians must comply with policies and procedures governing supervision that are established by the University of Puerto Rico Medical Center at Río Piedras.

VII. SUPERVISING PHYSICIAN

A physician wishing to supervise a physician assistant must

- 1) be licensed in Puerto Rico;
- 2) be a credentialed member of the medical staff of the University of Puerto Rico Medical Center at Río Piedras or its affiliated institutions and clinics;
- 2) maintain a written agreement with the physician assistant. The agreement must state that the physician will exercise supervision over the physician assistant in accordance with any and all policies and procedures of the University of Puerto Rico Medical Center at Río Piedras and will retain professional and legal responsibility for the care rendered by the physician assistant. The agreement must be signed by the physician and the physician assistant and updated annually. The agreement must be kept on file at the University of Puerto Rico Medical Center at Río Piedras and included in the credentials file of both the physician and the physician assistant.

VIII. TITLE AND PRACTICE PROTECTION

Any person not authorized to practice as a physician assistant under this Act is guilty of a felony and is subject to penalties applicable to the unlicensed practice of medicine if he or she

- 1) holds himself or herself out as a physician assistant;
- 2) uses any combination or abbreviation or the term "physician assistant" to indicate or imply that he or she is a physician assistant; or

IX. IDENTIFICATION REQUIREMENTS

Physician assistants authorized to practice under this Act shall keep shall, when engaged in their professional activities, wear a name tag identifying themselves as a "physician assistant."

X. EFFECTIVE DATE

This act is to take effect immediately upon signature by the governor and expires five years from the date of enactment unless renewed or revised.

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Appendix J



Doctor, could you use some help?

Physician assistants (PAs) are health professionals who deliver medical care as part of the doctor's team. Educated in the medical model in medical schools and teaching hospitals located across the continental U.S., PAs are trained to perform histories and physicals, treat illnesses, care for injuries, assist at surgery, provide patient education and follow-up and to assist specialist physicians in the care of complex patient problems. PAs are authorized to practice in all 50 states, the District of Columbia, Guam, and in the US Virgin Islands, but not in Puerto Rico. For more information on physician assistants, visit www.aapa.org. If you are interested in helping bring PAs to doctors and hospitals in Puerto Rico, contact pasforpuertorico@aapa.org or 703/836-2272 ext. 3216.



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