## Characteristics of Physicians who Left Practice in Texas:

2000-2009



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### **Executive Summary**

2000

2001

2002

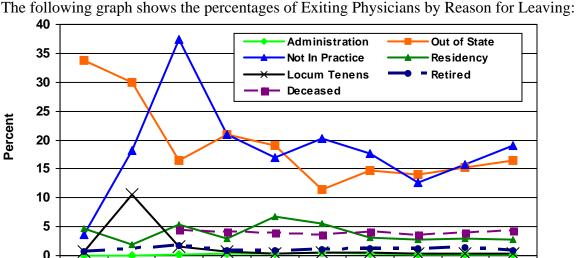
2003

Previously, the Health Professions Resource Center (HPRC) conducted a study of the Direct Patient Care (DPC) Physicians who were new to the Texas workforce over the last decade (2000-2009). This report analyzes the characteristics of the physicians who left Active DPC practice (Exiting Physicians) during that time. Texas lost about 5% of the Active DPC Physician workforce (this figure does not include the new physicians who entered the workforce; each year there is usually a net gain of physicians). HPRC intends to combine the findings from these two studies to create a general picture of the future state of the physician workforce in Texas.

The median age of Exiting DPC Physicians in Texas increased from 46 years in 2000 to 51 years in 2009. Trends show that graduates from a medical school in Texas have higher median ages than their counterparts when they leave Active DPC practice, suggesting that increasing the percentage of Texas graduates in the workforce could help to increase the number of physicians who stay in practice in Texas longer, and help to alleviate some of the losses due to retirements. Physicians born in Texas were also older when they left Active DPC practice than those born in other states or countries. This illustrates why it is important to "home-grow" physicians.

The proportion of physicians who exited from a hospital setting was greater than the proportion of all physicians who were practicing in a hospital setting, the implication being that the Exiting Physicians came disproportionately from hospital settings, which could possibly lead to shortages of physicians in hospitals in the future.

Each year, an average of 7.5% of the Exiting Physicians practiced in a rural county, and an average of 7.5% of the total Active DPC Physicians practiced in a rural county. An average of 6.0% of the Exiting Physicians practiced in one of the 32 border counties, while an average of 6.6% of the total Active DPC Physicians practiced in a border county. This suggests that physicians are leaving the rural and border areas in the same proportions as their composition in the overall workforce, and while any current shortages may continue, they shouldn't be exacerbated by these physicians leaving.



2004

2005

2006

2007

2008

2009

Including just the years for which complete data were available, 2002-2009, on average each year:

- 1.0% of the Active DPC Physicians switched to Not In Practice status, and 6.6% of those also moved out of state. The overall median ages were in the mid 60s, but the median ages for the males was generally 15-20 years greater than that for females. The data appears to suggest that the vast majority of those physicians will not return to Active DPC Practice in the near future. The average time in practice for those who did return was 3.7 years. The general conclusion is that most physicians who switch to Not In Practice status are permanently lost to the Texas workforce; however, they do continue to hold Texas licenses and theoretically could be a source of physicians in an emergency.
- 0.9% of the Active DPC Physicians moved out of state, and 42.9% of those were age 40 or younger, suggesting they were likely not retiring and would have many years left in their careers. Losing so many younger physicians to other states may exacerbate shortages in the future. Eleven percent of them returned to the state from which they graduated from medical school, and approximately 10.1% returned to their place of birth. Almost half of those physicians who moved back to their state of medical school did so after practicing in Texas for less than 10 years. In general, it appears that 75% of the physicians who move out of state are lost to the Texas workforce, for the short term if not permanently.
- 0.3% of the Active DPC Physicians switched to Administration; the median ages were in the low to mid 50s, and 4.1% of them also moved out of state.
- 0.2% of the Active DPC Physicians switched to Resident status. The median ages were generally in the early to mid 30s, but on average, about 25% were age 40 or older; 13.2% of those physicians who indicated "Residency" also moved out of state. The data appears to indicate that most of the physicians who complete a residency program in Texas remain in Texas to practice, but most of those who move out of state for a residency program are not likely to come back to Texas; and, half of them are under age 41, meaning that most of them will likely practice for many more years. This suggests that more residency slots in Texas could help to retain more physicians.
- 0.06% of the Active DPC Physicians retired; 10.7% of those also moved out of state. The average age for retiring physicians was 66.8 years; the average age for males was 68.4 years, and the average age for females was 58 years.
- 0.03% of the Active DPC Physicians switched to Locum Tenens status; at least half of them were age 50 or older. Most Locum Tenens physicians stay in that status for several years, and only a small percentage return to Active DPC practice immediately after leaving Locum Tenens status; therefore, if a physician is lost due to switching to Locum Tenens status, that physician *may* re-enter the Active workforce at some later date, but it will likely be several years.
- On average, 77 Active DPC physicians died each year.

### Introduction

The Health Professions Resource Center (HPRC) collects licensing information on many health professions in Texas, and provides information related to the current and past supply of health professionals. Planners and policy makers often ask for information regarding the future state of the workforce. HPRC has evaluated several projection models but has not been able to find one that seems to accurately portray the needs of Texas. Being a geographically large state with a diverse population, Texas has unique needs that a general projection model can not anticipate.

Rather than attempt to create a new projection model to yield specific numbers, HPRC decided to analyze the characteristics of the Active Direct Patient Care (DPC) Physicians who started practicing in Texas during 2000-2009; those results are published in a previous report, *Characteristics of New Physicians in Texas, 2000-2009* (the report can be found online at <a href="http://www.dshs.state.tx.us/CHS/HPRC/publicat.shtm">http://www.dshs.state.tx.us/CHS/HPRC/publicat.shtm</a>). HPRC then analyzed the characteristics of the physicians who left Active DPC practice during the last decade due to retirements, deaths, leaving the state, becoming inactive, or switching to a non-DPC status such as Research or Administration; that analysis is the subject of this report. HPRC also does not include the Military, Veterans' Affairs, or Public Health Service physicians in the data for Active DPC because those providers are usually not available to the general public. More information on which physicians HPRC considers "Active DPC" can be found on the HPRC website at:

http://www.dshs.state.tx.U.S./CHS/HPRC/Physmeth.shtm.

Ultimately, HPRC hopes to combine the findings from these two studies to create a general picture of the future state of the physician workforce in Texas. The end result will likely not be a firm projection with specific numbers, but rather a general projection of what can be expected in the near future, based on past trends, if the status quo is maintained. Changes in the economy, health care legislation, population shifts, and even world events, can affect projections.

### Methodology

It must be noted that the files for multiple years had to be joined to determine when a physician left and where they went. For example, the 1999 Active file was joined to the 2000 Master file (which contains active and inactive records, and the records for Texas license holders practicing out of state). Physicians who were Active DPC in 1999 but not Active DPC in 2000 would be considered "Exiting Physicians." Most of the time, the Exiting Physicians would be on the Master files (in this case 2000) but would not be considered to be Active DPC status, and in those cases, HPRC was able to determine if that physician moved out of state or switched to an inactive license status. In some cases, a physician would be on the 1999 file but would not be on the 2000 Master file, which means that physician did not continue to hold a Texas license in the second year analyzed (in this case 2000); in those cases, HPRC was not able to determine their reasons for leaving. From 2002 to 2009, all of the Exiting Physicians were included in the files for the second year of the two matched files, but in 2000 only 53.6% were included, and in 2001 only 65.5% were included. Therefore, the information on Exiting Physicians for

those years isn't complete. The numbers and demographics are complete, but information such as reasons for leaving, or where they went, isn't available.

The data files were collected around September each year. Therefore, when comparing a physician's status on the 1999 file with the 2000 file, HPRC had no way of determining if that physician left in the last three months of 1999 or the first nine months of 2000. For the purposes of this report, it was assumed that all of the physicians who left active DPC practice in Texas left in the later of the two years of the two matched files, in this example: 2000. Also, because the information on a given physician was usually more complete when they were active, information such as age and other demographics were taken from the earlier year of the two files (in this case 1999). So in this report, if it is stated that Physician A left practice in 2000 at age 67, that means that Physician A left practice sometime between September 1999 and September 2000, and that physician turned 67 sometime in 1999. Therefore, there may be a slight margin of error for the ages reported here.

### **Physicians Who Left Active DPC Practice in Texas**

In conducting this analysis, HPRC compared the files of active DPC Physicians with the Texas Medical Board's master files of all licensees. For this report, "licensee" refers to any person who holds a license to practice medicine in Texas issued by the Texas Medical Board. The term "Exiting Physicians" applies to those physicians who were classified as Active DPC Physicians at some point during the last decade but who later became inactive at some point during that decade. This could include physicians who retired, died, moved out of state, or left Direct Patient Care in favor of Research or Administration, or who joined government/military service, as HPRC does not include those physicians in the Active DPC data. "Active DPC Physicians" refers to only those physicians who are in Direct Patient Care (rather than Administration, Faculty, or Research) and who are not Residents or fellows, or employed by the government or military. "Exiting Physicians" are those who may or may not currently hold a Texas license, but they held a Texas license and were classified as "Active" and "Direct Patient Care" at some point during the decade but did not have that classification the following year.

**Table 1. Number of Exiting DPC Physicians** 

	Total Active DPC	Total Who Left	Percent of	
Year	Physicians	Active DPC Practice	Total	Month Data Obtained
2000	31,769	1,010	3.2	September
2001	32,281	1,416	4.4	October
2002	33,094	1,614	4.9	September
2003	34,432	2,029	5.9	September
2004	34,904	2,020	5.8	September
2005	35,811	2,463	6.9	October
2006	36,450	1,762	4.8	September
2007	37,177	1,687	4.5	August
2008	38,387	1,999	5.2	October
2009	39,374	1,720	4.4	August

On average over those years, Texas lost about 5% of the Active DPC Physician workforce (Table 1). The numbers of Exiting DPC Physicians has fluctuated considerably from year to year. The lowest number was 1,010 in 2000, and the highest number was 2,463 in 2005 (2005 was also the year that showed the highest number of new physicians; and, Hurricane Katrina struck in late August of 2005; the physician data for that year were obtained from TMB in October).

### Gender

The Exiting DPC Physicians were predominately male over the past decade, but the percentage of females steadily increased each year, from 24.1% in 2000 to 29.5% in 2009 (Figure 1). As a predominately male profession that is seeing increasing numbers of females each year, it would be expected that the older physicians considered most likely to retire would be male, but that the increasing feminization of the workforce would lead to an increasingly higher percentage of retirees who are female. Any complete study of the workforce and projections for the future must take gender trends and differences into account.

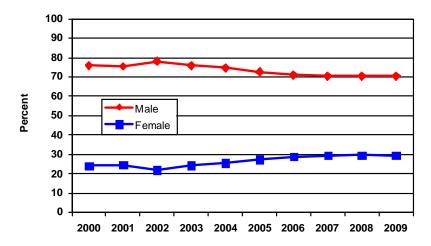


Figure 1. Exiting DPC Physicians by Gender

### Age

The median age of Exiting DPC Physicians in Texas increased from 46 years in 2000 to 51 years in 2009 (Figure 2). At first glance this seems positive; the implication being that physicians are working longer before leaving the workforce. But as the previous report on new physicians showed, the median age of new physicians is also increasing, meaning that many physicians are older when they begin their practice. So the higher median age for those leaving does not necessarily indicate that physicians are practicing longer. And, some reasons for leaving - such as retirement - are usually age related, while other reasons for leaving - such as moving out of state or leaving Direct Patient Care for Research - may not be age specific. No reason could be determined for the unusual spike in the median ages over 2001 and 2002. The median ages for females leaving the workforce are significantly lower than that for the males. This could partially be explained by women who temporarily leave the workforce at younger ages for family reasons and who may return later.

60 57 54 51 Age in Years 48 45 42 39 AII Male 36 Female 33 30 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Figure 2. Median Ages of Exiting Physicians by Gender

### Race/Ethnicity

The Exiting DPC Physicians have been predominately White, just as the overall workforce is predominately White, but the percentage of Exiting Physicians who are White has been decreasing, just as it has been decreasing in the overall DPC workforce (Figure 3). The decrease for White has been mostly supplanted by increases for Other (primarily Asians), and the percentages of Hispanics and Blacks have remained fairly level.

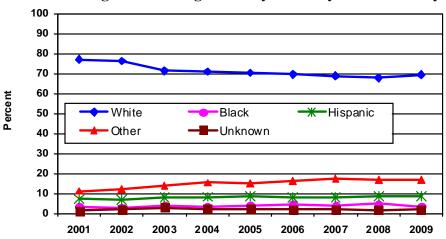


Figure 3. Exiting DPC Physicians by Race/Ethnicity

Just as with gender, practice characteristics vary among racial/ethnic groups, and this needs to be considered when conducting a workforce analysis and projection. For example, some studies have shown that minority physicians are more likely to treat low income or uninsured people, which is critical in Texas where one in four people do not have health insurance.

### **Medical School**

Historically over the last decade, the majority of the Exiting Physicians were educated in a medical school outside of Texas (Figure 4), but this is not surprising since 55.5% of the

physicians practicing in Texas in 2009 were educated in other states or other countries. It is interesting that the percentages for Texas graduates and other U.S. graduates seem to have an inverse relationship, while the percentage for foreign, or International Medical Graduates (IMGs), has continued to rise steadily over the last few years, until a slight drop in 2009.

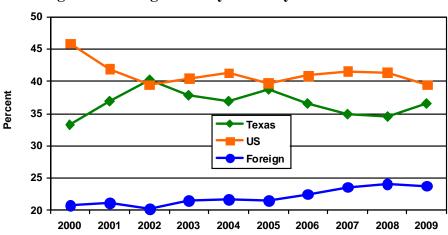


Figure 4. Exiting DPC Physicians by Location of Medical School

HPRC also studied the data to see if there were any correlations between Location of Medical School and the age at which the physicians left. The median ages of Exiting Physicians fluctuated considerably, but for most of the last decade, graduates of foreign medical schools (IMGs) were generally older when they left Active DPC practice than those physicians from Texas or other U.S. states (Figure 5). Those trends have changed in the last few years, so that in 2009, Texas graduates were the oldest and foreign graduates were the youngest.

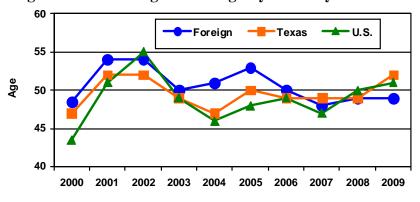


Figure 5. Median Age of Exiting Physicians by Medical School

It must be noted that HPRC was bound by certain limitations when studying these data. For example, once a physician has moved to another state, little information is available on whether or not that physician remained in Active DPC practice in that state, or if that physician also switched to a non-DPC status or retired. The files do not contain enough

information to accurately determine exactly *why* a physician left the state, although in some cases it is possible to make general observations. Therefore, the age at which a physician leaves Active DPC practice in Texas should not be confused with retirement age. However, if present trends continue and Texas graduates continue to have higher median ages than their counterparts when they leave Active DPC practice, and since the overall median age of the workforce is increasing (which will eventually lead to more retirements), one could suggest that increasing the percentage of Texas graduates in the workforce could help to increase the number of physicians who stay in practice at later ages and help to alleviate some of the losses due to retirements.

### Place of Birth

HPRC also compared the median ages with Place of Birth. The trends were significantly different than those for Location of Medical School (Figure 6). The physicians who were born in Texas were consistently older when they left Active DPC practice than those born in other states or countries, and the median age for the Exiting Physicians from Texas also had the largest increase over the last decade.

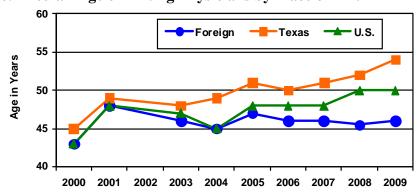


Figure 6. Median Age of Exiting Physicians by Place of Birth

Again, the meaning behind this isn't clear, but it suggests that physicians born in Texas will remain in Active DPC practice at later ages, just as those who graduated from a Texas medical school. This is another motivation to "home-grow" more physicians, both those born in Texas and those educated in Texas.

### **Practice Setting**

Over the decade, the percentage of Exiting Physicians who practiced in a hospital setting increased, until recently, when there was a sharp decrease (Figure 7).

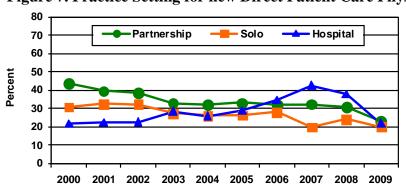


Figure 7. Practice Setting for new Direct Patient Care Physicians

Part of the decrease in 2008 and 2009 for all practice settings can be explained by the addition of several categories to the Practice Setting field in 2008. The Texas Medical Board changed the categories for Practice Setting and Practice Type, adding a Setting for Direct Medical Care (which appears to have the same general meaning as a Practice Type of Direct Patient Care). Also, at the request of the Texas Medical Association, HPRC began to include physicians with a Practice Type of "Research" or "Faculty" (which HPRC excluded in previous years) if they also indicated the new Practice Setting of Direct Medical Care. This, and other changes over the years in the methodology of data collection, may skew some specific indicators. In 2009, 19.8% of the Exiting Physicians chose Direct Medical Care as their Setting. With more categories to choose from, fewer are indicating hospital practice, solo practice, or partnership/group practice. One concern is that, if the recent decrease in the percentages of physicians leaving a hospital setting is only due to the addition of other categories - and if there had been no changes in categories, the percentages would have continued to increase as they had in the past - it may be an indication that hospitals could experience shortages in the future, since more of the physicians who are leaving the workforce indicated they were in a hospital setting. It may be that the hospital trend line from 2000 to 2007, showing a steady increase, is more accurate than the 2008-2009 data showing a decrease.

In 2004, 17.6% of all Active DPC physicians indicated they were practicing in a hospital setting, compared with 32.4% in a solo setting and 46.8% in a partnership/group setting. In 2005, 18.7% of all Active DPC physicians indicated they were practicing in a hospital setting, compared with 33.2% in a solo setting and 46.5% in a partnership/group setting. However, in 2004, 25.8% of the Exiting Physicians left a hospital setting, and in 2005, 28.9% left a hospital setting. This information suggests that the proportion of physicians leaving a hospital setting is greater than the proportion of physicians practicing in a hospital setting in the overall Active DPC workforce, and is more evidence of possible future shortages in hospital settings, if these physicians are not replaced by new ones.

Also, due to coding problems on the database, many physicians were incorrectly identified as being in the military in 2006 and 2007. While the problem was corrected to the extent that HPRC was able to determine the number of non-military DPC Physicians to include in the statistics, HPRC was not able to correct the Practice Settings for those records; therefore, records that are included in the data may still be listed as having a Practice Setting of military when solo or hospital may have been more accurate. This is another reason why the percentages for all settings decreased in the last few years; basically, the 2007 and 2008 data contained errors on the files for the Practice Setting categories and, as explained in the Methodology section of this report, the 2007 and 2008 data would apply to those physicians who "exited" in 2008 and 2009, which is where the discrepancies appear in Figure 7.

### **Specialties**

It has been widely reported that Texas has an overall shortage of physicians, but some shortages may appear more acute when looking at particular specialties. An accurate workforce projection should take specialties into account; just bringing more physicians to Texas will not alleviate all of the shortages if certain specialties (or geographic areas)

are neglected. In general, the Primary Care specialties have the highest percentages, and account for almost half, of the Exiting Physicians (Figure 8). Because Texas has been experiencing shortages of Primary Care physicians, it is a concern that so many are leaving. The good news is that the percentage of Primary Care physicians who are leaving has been decreasing lately. A higher percentage of females than males have been leaving Primary Care, but this may not be a cause for concern, as a higher percentage of females are also entering Primary Care; the Primary Care specialties are becoming more and more female, which would naturally lead to more females eventually leaving.

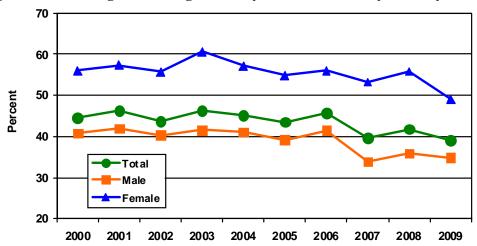


Figure 8. Percentage of Exiting DPC Physicians in Primary Care by Gender

Because Texas has historically had shortages of all of the mental health professions, HPRC took a special look at Psychiatrists. The percentage of Exiting Physicians who specialized in Psychiatry (which includes Child Psychiatry and other psychiatric professions such as Forensic Psychiatry), while fluctuating, has shown no real net change over the last decade (Figure 9). Among the Exiting Physicians, a higher percentage of females specialized in Psychiatry than males; however, as with the Primary Care professions, larger percentages of females are entering Psychiatry, so it could be expected that an increasingly higher percentage would leave. No reason could be determined for the fluctuations, especially for female Psychiatrists; however, the percentages are small, and for females only ranged from 4.8% to 9.4%.

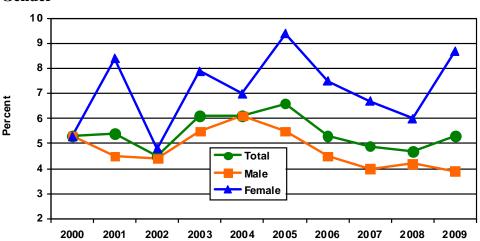


Figure 9. Percentage of Exiting DPC Physicians Specializing in Psychiatry by Gender

In general, the same specialties had the highest percentages of Exiting Physicians each year (Table 2), although in later years Emergency Medicine began to appear in the top percentages. For the most part, Texas is losing the most physicians in Primary Care, Anesthesiology, and Psychiatry.

Table 2. Percent of Exiting DPC Physicians by Specialty

2000		2001		2002		2003		2004	
Internal Medicine	14.4%	Family Practice	13.7%	Internal Medicine 13.9%		Internal Medicine 15.2%		Internal Medicine	e 15.2%
Family Practice	13.8%	Internal Medicine	12.7%	Family Practice	12.6%	Family Practice	12.4%	Family Practice	12.4%
Pediatrics	8.3%	Pediatrics	8.7%	Pediatrics	7.1%	Pediatrics	7.6%	Pediatrics	7.6%
Anesthesiology	5.7%	Anesthesiology	5.9%	Ob/Gyn	6.7%	Psychiatry	6.1%	Psychiatry	6.1%
Ob/Gyn	5.3%	General Practice	5.8%	Anesthesiology	6.1%	Anesthesiology	5.7%	Ob/Gyn	6.1%
Psychiatry	5.3%	Psychiatry	5.4%	General Surgery	6.1%	Ob/Gyn	5.4%	Anesthesiology	5.4%
General Practice	5.0%	Ob/Gyn	5.3%	Psychiatry	4.5%	General Surgery	5.1%	General Surgery	4.2%

2005		2006		2007		2008		2009	
Internal Medicine	13.2%	Family Practice	14.1%	Internal Medicine	13.3%	Internal Medicine	12.8%	Internal Medicine	12.6%
Family Practice	12.6%	Internal Medicine	13.6%	Pediatrics	9.5%	Family Practice	11.8%	Family Practice	10.8%
Pediatrics	8.9%	Pediatrics	9.2%	Family Practice	8.8%	Pediatrics	9.7%	Pediatrics	8.5%
Psychiatry	6.6%	Anesthesiology	6.5%	Anesthesiology	6.5%	Anesthesiology	6.4%	Psychiatry	5.3%
Anesthesiology	6.2%	Ob/Gyn	5.4%	Ob/Gyn	4.9%	Psychiatry	4.7%	Ob/Gyn	4.9%
Ob/Gyn	5.7%	Psychiatry	5.3%	Psychiatry	4.3%	Ob/Gyn	4.5%	Anesthesiology	4.9%
General Surgery	4.0%	Emergency Medici	ne 4.4%	Emergency Medicir	ne 4.2%	Emergency Medicir	ne 4.2%	General Surgery	4.0%

For comparison purposes, in 2009, 14.9% of the 39,374 Active DPC Physicians specialized in Family Practice/Medicine, 12.4% specialized in Internal Medicine, 7.7% specialized in Pediatrics, 6.5% specialized in Anesthesiology, 6.0% specialized in Obstetrics and/or Gynecology, and 4.2% specialized in Psychiatry. For the most part, the proportions of Exiting Physicians in various specialties mirrors the proportions of all DPC Physicians currently practicing in those specialties; therefore, no specific specialty exhibited losses of a proportion that should indicate unexpected shortages in the future.

It was also noted that some of the Exiting Physicians indicated a different specialty in the year that they were not Active DPC than they had in the previous year when they were Active DPC. HPRC did not consider a physician to have changed specialties if the two specialties were in the same general field; for example, if a physician indicated a change from Psychiatry in 2000 to Child Psychiatry in 2001, this was not considered to be a change in specialty. Likewise, if a specialty was listed one year but no specialty was listed the following year, or if it was listed as Unknown or Other, then HPRC did not consider that to be a change of specialty but rather what could be expected if a physician retired or switched from DPC to Research, for example. But a change from Nephrology to Internal Medicine, for example, was considered a change in specialty; and, Internal Medicine is a primary care specialty while Nephrology is not. On average, 1.4% of the Exiting Physicians each year indicated a completely different specialty from one year to another. It would be interesting to study if this occurrence is observed in the overall workforce as well; and, although it may be difficult to determine, if these changes are accurate or if they may simply be due to some type of data entry or classification error.

### **Exiting Physicians by Geographic Area**

Over the last decade, an average of 7.5% of the physicians who left each year were practicing in a rural area. And over that same period, an average of 7.5% of all Active DPC Physicians were practicing in a rural area. Also, an average of 6.0% of the physicians who left were in one of the 32 border counties (defined by the La Paz Agreement), while an average of 6.6% of all Active DPC Physicians were practicing in a border area. This suggests that physicians are leaving the rural and border areas in the same proportions as their composition in the overall workforce, and while any current shortages may continue, they shouldn't be exacerbated by these physicians leaving.

### **Reasons for Leaving**

In most cases, the Exiting Physicians still held Texas licenses and were still on the Master files even when they were no longer in Active DPC practice, so HPRC was able to determine to some extent the reasons why most physicians were not considered to be in Active DPC practice in Texas. However, many physicians had multiple reasons for leaving, such as they both retired and moved out of state, either of which would have caused them to be removed from the Active DPC file. The information below pertains to those physicians who left Active DPC practice during the decade of this study. In general, if a physician moved out of state but there was no other reason given as to why that physician was no longer in Active DPC practice, then it is highly possible that the physician is actively practicing in another state. Likewise, if a physician indicated a switch from Direct Patient Care to Research, that would cause the physician to be removed from the Active DPC file. However, if a physician both moved out of state and switched to Research, for the purposes of this report, that physician would be included in the data for those who switched to Research but not those who moved out of state. Physicians aren't counted twice as to the reasons they left, and HPRC attempted to include them under the prevailing reason. This allowed HPRC to estimate which physicians left only because they moved out of state, and which ones had other reasons as well. Some physicians had three or more reasons for leaving Active DPC practice; for example, one year a physician changed his Practice Type from Direct Patient Care to Resident, changed his Practice Setting from Partnership to Research, and moved out of state. Any one of these would be cause to be excluded from the Active DPC file. Due to cases such as that, and various errors in the data, these numbers should be considered to be good estimates but not exact. Many physicians who moved out of state did not enter any practice information such as their setting, so it is difficult to determine how many of those who moved out of state are still actively practicing, or in what capacity.

Understanding the reasons why physicians leave the state may lead to better programs for recruitment and retention. For example, a 70 year old physician who is retiring and moving out of state is not someone who would be likely to continue practicing under most circumstances; a 70 year old could be expected to retire, and the fact that he is moving out of state has little relevance. However, in a case where a 40 year old physician moves out of state and enters a residency program, that physician is likely to re-enter the Active DPC workforce at some time, and will likely practice many more years, so it would be of benefit to determine what types of retention programs might have kept that person in Texas. The data in this report indicates that many physicians may

leave the Active DPC workforce for Teaching, Research, Locum Tenens status, or other reasons, and yet return to the Active DPC workforce within a few years. But the data does not show that a high percentage of physicians who leave the state return; therefore, physicians who leave the Active DPC workforce AND leave Texas are a greater potential long-term loss to the workforce than those who leave the Active DPC workforce but stay in Texas.

Figure 10 shows what percent of the total number of Exiting Physicians left for various reasons. No explanation could be determined for the spike in 2001 for those who identified themselves as Locum Tenens or for those in 2002 who indicated Not In Practice. However, the percentages of those who leave the state and those who switch to Not In Practice status often seem to have interesting and unexplained inverse relationship.

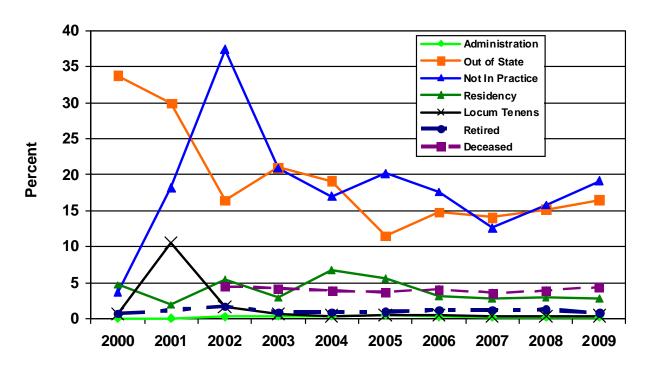


Figure 10. Exiting Physicians by Most Common Reasons

Some reasons for leaving were examined in more detail than others. For example, there were many more physicians who moved out of state than those who switched to Administration, so more study was devoted to those who moved out of state. In the following tables, the "Percent of Total DPC" is the number who left for each specific reason divided by the total number of Active DPC Physicians for that year (not to be confused with Figure 10, which is the percent of Exiting Physicians, not the percent of all Active DPC Physicians). The data for 2000 and 2001 in these tables may not be complete, as just over half of the physicians who left were included on the Master files for those years; for those who were not on the master files in their inactive year, HPRC was not able to determine a cause for leaving.

Physicians who moved out of state or switched to Not In Practice status accounted for the bulk of the Exiting Physicians. The percentages of those who switched to Administration and those who Retired have stayed fairly low and flat. The same is true for Locum Tenens physicians, other than the unexplained spike in 2001. The percentage who die each year has also remained fairly level. There is more fluctuation in the percentages of those who leave Active DPC practice to enter a Residency program; however, those fluctuations appeared to have leveled off over the last four years.

### Administration

Table 3 shows the information for those physicians who left Active DPC practice for Administration. Including just the complete years of 2002-2009, on average, 0.3% of the Active DPC Physicians switched to Administration each year. These physicians were predominately male, with median ages in the low to mid 50s. The males who switched to Administration were generally older than the females; at least a third of the males were over age 60, with much smaller percentages of females of that age. From 2002-2009, 4.1% of those physicians who indicated "Administration" also moved out of state.

Table 3. Exiting Physicians Who Switched to Administration

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number	16	17	80	139	114	186	106	82	82	88
% Male	81.3	88.2	85.0	79.1	85.1	79.0	80.2	79.3	74.4	75.0
Median Age	52.5	55	53.5	52	53	53	52.5	54	55	54
% of Males that are Age 60+	30.8	40.0	42.6	36.4	32.0	34.0	29.4	33.8	39.8	43.9
% of Females that are Age 60+	0.0	0.0	16.7	10.3	0.0	7.9	4.8	11.8	6.3	18.2
% of Total DPC Physicians	0.4	0.3	0.5	0.3	0.2	0.2	0.2	0.4	0.3	0.5
# Who also Moved Out of State	2	0	8	3	5	3	5	4	5	3

### Out of State

Table 4 shows the information for those physicians who left Active DPC practice in Texas by moving out of state. Including just the complete years of 2002-2009, on average, 0.9% of the Active DPC Physicians move out of state each year. This includes only those physicians who moved out of state, and not those who indicated an additional reason why they should not be considered to be in Active DPC practice. Several other physicians moved out of state and also indicated another reason for leaving Active DPC practice, such as switching to Administration. The numbers of physicians who indicated multiple reasons are in the row labeled "Number OOS with other reason" in Table 4. Those are included in the appropriate table, in this case Table 3 (Administration). On average, from 2002-2009, 82 physicians per year moved out of state but also left Active DPC practice for another reason.

Those physicians were predominately male, with median ages in the low 40s. The males who moved out of state were generally older than the females, with median ages ranging two to six years higher. Generally, over 10% of the males were age 60 or older, with

smaller percentages of females in that age range. Of those physicians age 60 and older who moved out of state, on average, 90.4% were males. The correlation of age is interesting because it can help to determine if the person who moved out of state was likely to retire, even if they did not indicate that they were doing so.

Of concern is that, on average, 42.9% of the physicians who moved out of state from 2002 to 2009 were age 40 or younger. Those physicians were likely not retiring and should have many years left in their careers, so losing so many younger physicians to other states may exacerbate shortages in the future.

Also, from 2002-2009, an average of 10.8% of those physicians who left Texas returned to the state in which they graduated from medical school.

**Table 4. Exiting Physicians Who Moved Out of State (OOS)** 

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number, OOS only	341	424	343	333	386	284	261	238	303	283
% Male	71.0	70.8	75.8	72.4	72.8	69.7	66.3	66.0	67.7	65.0
Of Males, what % Age 60+	8.3	9.7	11.2	12.0	9.6	12.6	7.5	14.0	13.2	13.0
Of Females, what % Age 60+	2.2	3.2	1.2	1.1	1.9	5.8	0.0	8.8	1.0	5.1
Of Those Age 60+, what % were Male	90.9	87.9	96.7	96.7	93.0	83.3	100.0	75.9	96.4	82.8
Of Those Age 40 and Younger, what % were Male	65.4	64.2	65.0	66.0	67.9	59.5	53.4	49.5	62.7	57.7
% All Age 40 and Younger	46.6	38.2	40.8	46.8	47.7	42.6	45.2	39.9	44.2	39.2
% Who Went Back to State of Medical School	11.1	9.9	11.0	10.7	11.1	12.0	14.2	8.4	12.2	7.4
Median Age	41	43	42	41	41	42	42	43	43	44
Median Age Female	39	41	39	39	40	40	38	39	40	42
Median Age Male	42	44	45	43	42	44	44	45	44	47
% of Total DPC	1.1	1.3	1.0	1.0	1.1	0.8	0.7	0.6	0.8	0.7
Number OOS with Other Reason	20	34	68	24	77	108	81	120	99	78

HPRC attempted to study the reasons physicians left the state, but this is difficult because only physicians who maintain a Texas license for some period after moving out of state are included in the Texas databases, so in some cases the information was incomplete. It may also be possible that some physicians who have moved out of state indicated their status as Not Active or Not In Practice, because that is their status in Texas, even though they may actually be active in another state. Figure 10 appears to suggest this, as the percentages for those who left the state and those who went to Not In Practice status appear to have an inverse relationship, although more information would be needed to verify that was the case. As Table 6 shows, only a small number of the physicians who indicated they were Not In Practice also moved out of state. Due to the large number of physicians who moved out of state during the last decade, it was not possible to study each of them in detail. HPRC focused on 2004, the year with the largest number who moved out of state (386), and studied those records in detail.

Of the 386 physicians who moved out of state in 2004, all of them indicated that they remained in Direct Patient Care in their new location, and 72.3% indicated that they were in either a hospital or partnership/group practice setting. Over 96% had an Active license registration status (which does not necessarily mean they were actively practicing), and 89.4% indicated that they worked 40 or more hours a week. The median age was 42 - meaning that half the physicians were under that age and half were over - and the average age was 42.9. Eighty percent of them were ages 30-50. Due to the high number of unknown values for Birthplace, HPRC could only confirm that 10.1% returned to their place of birth. Eleven percent went back to the state where they completed medical school. Of the 39 who returned to their birthplace and the 43 who returned to where they completed medical school, 25 of them had the same state for both birthplace and medical school. Almost 33% of them were in Primary Care and 4.1% were in Psychiatry.

Of the forty-three who returned to the state where they completed medical school, only four had returned to Texas by 2009. The median age was 39 and the average age was 43. All had an active license registration status, 81.4% indicated they were working 40 or more hours a week, and all were in Active DPC practice, suggesting that these physicians did not move back to that state to retire but to continue practicing. Forty-nine percent graduated from medical school between 1995 and 2000, meaning that almost half of those physicians who moved back to their state of medical school did so after practicing in Texas for less than ten years.

HPRC also analyzed the additional 77 physicians who moved out of state in 2004 and who also indicated another reason which would have made them inactive in Texas. Of these, only 26% indicated they were in Direct Patient Care; also, 9.1% indicated Teaching, 6.5% indicated Administration, 2.6% indicated Research, 33.8% indicated Not In Practice, and 22.1% changed to Resident status. Only 29.9% indicated they were in a hospital or partnership/group setting, with 22.1% indicating they went into the Military, Veterans Affairs, or Public Health Service. Another 20.8% described their setting as Other, and 7.8% were Unknown (compared to 1% Unknown for the other 386 who left the state in 2004). Almost 82% had an Active License Registration status, 10.4% had an Active Not Practicing status, and only one record (1.3%) indicated Texas Retired. Forty-seven percent were in Primary Care and 11.7% were in Psychiatry. The median age was 41 years, and the average age was 44.5 years. Sixty-five percent were male, and 74% were ages 30-50. Only three of the seventy-seven (3.9%) returned to the state where they were born, and only seven (9.1%) returned to the state where they completed medical school.

To be more conclusive, a study would have to be conducted using multiple years of data on out of state physicians, and that was time-prohibitive for this report. But the general conclusion that can be drawn from the data from 2004 is that the majority of physicians who move out of state are not doing so to retire but to continue practicing, and they maintained an active license status and indicated they worked 40 or more hours a week, in Direct Patient Care. The two data sets were combined (those who only moved out of state and those who moved out of state and also left the Active DPC workforce for another reason), and this yielded a total of 463 physicians who moved out of state in 2004. The combined data show that 83.8% worked 40 or more hours a week, 87.7%

remained in Direct Patient Care, 96.3% indicated a Practice Setting which would have included them in our DPC data (as opposed to military, research, or administration), and 98.7% maintained an active license status. Eleven percent returned to the state where they completed medical school, and 9.1% returned to the state where they were born (some physicians are included in both figures). Only 26 records indicated both Not In Practice and Out of State.

HPRC tracked those 463 records over the following years in an attempt to obtain a better picture of exactly what those physicians who moved out of state were doing. Table 5 shows how many of the 463 maintained an Active License Status in Texas, how many had a Texas practice address, how many indicated Locum Tenens or Not In Practice in the Practice Address field, how many returned to Direct Patient Care, and how many had a Practice Setting that precludes them from being included in the data (such as those in the military or government settings). However, this information was not available for 2006 and 2007 due to coding errors on the database. The table also shows the percentage who worked 40 or more hours a week (data not available for 2009).

Table 5. Analysis of Physicians Who Moved Out of State in 2004

Of the 463 who moved out of state in 2004:	2005	2006	2007	2008	2009
Number who still held Texas licenses	463	463	463	463	463
Number with an Active License Status	438	397	376	359	338
Number indicating Direct Patient Care	371	362	368	368	361
Number who had Texas practice addresses	36	57	72	89	94
Number indicating Locum Tenens	1	0	0	0	0
Number indicating Not In Practice	5	3	3	3	5
Number indicating military/government practice settings	23	NA	NA	19	15
% Working 40+ hours/week	78.6	78.2	78.0	76.0	NA

Eventually, 104 (22.5%) of the 463 who moved out of state in 2004 returned to Texas at some point between 2005 and 2009, and most of them were in Active DPC practice. There were 36 cases where a physician practiced in Texas in 2003, practiced out of state in 2004, and then returned to Texas in 2005 and continued to practice through 2009. While some of these could have been miscoded and actually never left the state, the few records that HPRC spot-checked were all verified.

More in-depth study analyzing a larger period of time would be necessary for conclusive results, but the analysis conducted by HPRC seems to suggest that physicians moving out of state is one of the top two reasons Texas loses physicians. The vast majority of those physicians were not close to retirement age, and they appeared to stay in active DPC practice, full-time, in the state to which they had moved. While place of birth and location of medical school may be a consideration for some of those physicians, it does not appear to be a deciding factor for the vast majority. However, those physicians who were lost because they returned to the state where they completed medical school were often younger and had graduated in the last decade, so even though only about 10% of

the physicians who left fell into this category, this is a category of physicians who were young and active, and they were a loss to Texas. This might suggest that Texas could retain more physicians if there were more medical schools or residency slots. Anecdotal evidence suggests that many physicians who can not get into a residency program in Texas enter one out of state and then remain in that state to practice, rather than returning to Texas, even if they completed medical school in Texas. Information was not available on the residency programs attended by these specific physicians, so HPRC could not determine if any of those physicians who left went back to the state where they completed their residency. Up to a quarter of those physicians may return to Texas to practice, but in general, it appears that about 75% of the physicians who move out of state are lost to the Texas workforce for several years, if not permanently.

### Not in Practice

Table 6 shows the information for those physicians who indicated Not In Practice as either a Practice Type or who entered "Not In Practice" in the Practice Address field. Many of them also moved out of state. Those physicians usually had active license status codes; the additional number of physicians with a License Status Code of "Not Active" is also listed at the bottom of the table but they are not included in these calculations.

Including just the complete years of 2002-2009, on average, 1.0% of the Active DPC Physicians switched to Not In Practice status each year. Those physicians were predominately male. The overall median ages were in the mid 60s, but the median ages for males was generally 15-20 years greater than that for females; and, on average, 92.8% of those physicians ages 60 and over were male. The higher median ages for males could lead to speculation that those physicians were preparing to retire. Younger females may go to Not In Practice status for a period of time due to childbirth or other family concerns and then re-enter the workforce later; that may partially explain the lower median ages for females. From 2002-2009, 6.6% of those physicians who indicated "Not In Practice" also moved out of state.

Table 6. Exiting Physicians Who Switched to Not In Practice

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number	37	258	603	425	344	498	310	213	315	328
% Male	82.4	75.6	82.4	80.9	77	75.9	71.9	69.5	75.6	73.5
Of Males, % Age 60+	80.0	82.1	79.1	78.2	78.1	74.6	92.9	88.7	90.9	92
Of Males, % Age 40 and Younger	10.0	2.6	2.0	1.7	3.0	17.3	4.9	15.6	23.1	17.1
Of All Those Age 60+, what % Male	96.0	87.4	94.5	96.4	93.7	91.6	92.9	90.3	90.9	92.0
Median Age	63	66	66	65	64	64	61	64	66	65
Median Age Female	48	48	47	43	41	44	46	43	49	49
Median Age Male	65	68	67	67	66	66	66	68.5	68	68
% of Total DPC	0.1	0.8	1.8	1.2	1.0	1.4	0.9	0.6	0.8	0.8
# Who Also Moved Out of State	0	17	25	24	26	33	27	16	24	26
# with License Status of "Not Active"	-	-	16	32	24	23	20	10	13	19
Of the 603 in 2002, # who were Active (returned) in Later Years	-	-	-	36	53	73	69	69	77	73

Due to the large number of physicians who switched to "Not In Practice" each year, HPRC conducted further analyses on those physicians. Of the 603 physicians who indicated they were on "Not In Practice" status in 2002, roughly 10% were in Active DPC practice at some point during the following seven years. Table 6 shows that of the 603 physicians who were "Not In Practice" in 2002, only 36 of those had returned to Active DPC practice in 2003, 53 of them were active by 2004, etc. However, most of them are counted in multiple years; for example, of the 36 who had returned in 2003, 27 of those were still active and included in the 53 who were active in 2004. A total of only 123 of the 603 (20.4%) had returned to Active DPC practice at some point between 2003 and 2009. Additionally, 51 (41.5%) of the 123 who returned left the workforce again prior to 2009. Twenty-eight (22.8%) of the 123 were active for only one year; however, four of those returned in 2009, the last year studied, and may stay in Active DPC practice in 2010 and beyond. Of the 123 physicians who returned from 2003-2009, there were 13 who left Active DPC practice before 2009 and then returned a second time. Of the 108 physicians who returned from 2003 to 2007, 69 (63.9%) were still in Active DPC practice in 2009, but a few of those were not active for consecutive years. Of the 603 physicians who were on Not In Practice status in 2002, only 13 returned in 2003 and were in Active DPC practice continuously through 2009.

Figure 10 suggests an inverse relationship between the percentage of physicians who move out of state and the percentage who switched to Not In Practice status. An average of about 6.5% of the physicians who indicated Not In Practice also moved out of state each year. Because a physician can not "leave" the workforce two years in a row, the fluctuations can not be caused by a physician indicating a status of Not In Practice one year and then Out of State the next year.

Of the 603 physicians who were on Not In Practice status in 2002, 325 (53.9%) still indicated Not In Practice in 2003. Also, 95.4% indicated a Texas address, although most of them were mailing addresses, as 86.6% did not enter a practice address. Of those 603 physicians, 78.6% had a license status of Active Not Practicing, 4.5% had an inactive license registration status, 1.7% were Deceased, 1% indicated Texas Retired, and 0.8% indicated they were on Locum Tenens status. In 2004, 94.9% of the 603 still indicated a Texas address.

By 2009, all 603 still held Texas licenses, and 93.7% still indicated a Texas address. Forty-nine percent had a status of Active Not Practicing, 33.8% had an inactive license registration status, 12.9% were Deceased, and 5% indicated Texas Retired. One hundred and forty-eight (24.5%) still indicated Not In Practice in the Practice Address field, and three indicated Locum Tenens. Four hundred and seventy five (78.8%) indicated a Practice Type of Not In Practice, and only 17.1% indicated Direct Patient Care. Forty percent indicated a Practice Setting of Not Applicable, and only 10.6% answered the "Number of Hours Practicing Per Week" question with an answer other than "Did Not Answer" or "Blank."

While HPRC does not have enough information to determine why those physicians were on "Not In Practice" status, the data appears to suggest that the vast majority of those physicians will not return to Active DPC Practice in the near future. And, those who do return often do so after an absence of several years; in addition, many of those who eventually do return are not likely to stay in Active DPC practice for very long. Twenty-five (20.7%) of those who returned from 2003 to 2008 returned for only one year. The average time in practice for those who returned was 3.7 years. During 2003-2009, twenty-nine stayed for one year, eighteen stayed for two years, eight stayed for three years, eighteen stayed for four years, twenty-five stayed for five years, twelve stayed for six years, and thirteen stayed for seven years. Since some of those in practice in 2009 may still be practicing in 2010 (2010 data was not available at the time of this report), it is likely that some of these physicians will practice longer than indicated here.

Switching to Not In Practice status does not appear to be a precursor to moving out of state; however, due to the number of those who were deceased by 2009 (78 had died by 2009 and the average age was 80.5; the youngest deceased was 51), and the median age of the Not In Practice physicians being usually around the mid to late 60s, it may be a precursor to retirement, and in fact many of those physicians may have retired and simply did not indicate Texas Retired as their license registration status. The general conclusion is that most physicians who switch to Not In Practice status are permanently lost to the Texas workforce; however, they do continue to hold Texas licenses and theoretically could be a source of physicians in an emergency.

### Residency

Table 7 shows the information for those physicians who left Active DPC practice to enter a residency program. Including just the complete years of 2002-2009, on average, 0.2% of the Active DPC Physicians switched to Resident status each year. Almost three-quarters of them were male. The median ages were generally in the early to mid 30s, but on average, about 25% were age 40 or older. From 2002-2009, 13.2% of those physicians who indicated "Residency" also moved out of state.

Table 7. Exiting Physicians Who Switched to Resident Status

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number	47	27	87	58	135	137	55	48	60	48
% Male	65.2	70.4	70.1	75.9	71.9	77.4	70.9	60.4	65.0	68.8
% Age 40 and Older	17.4	22.2	24.1	36.2	20.0	22.6	29.1	25.0	25.0	18.8
Median Age	33	34	35	37	33	33	34	33.5	35	33
% of Total DPC	0.1	0.1	0.3	0.2	0.4	0.4	0.2	0.1	0.2	0.1
# Who also Moved Out of State	9	4	11	3	17	15	8	11	10	11

HPRC looked at the records for all of the physicians who indicated they were on Residency status from 2000-2008, to compare with their status in 2009. A total of 654 physicians left Active DPC practice in Texas from 2000-2008 to become Residents, and 88 of those also moved out of state. Of the remaining 566 who indicated they remained in Texas for their residency, 533 still held Texas licenses by 2009. Of those, 86 had an inactive license registration status. Only 331 indicated they were in Direct Patient Care, and 138 were still classified as Residents. An unusually high number of all physicians in Texas left the practice hours question blank in 2009, so it was not possible to determine

how many of them were working full time, but in 2008, 557 of the 654 were on the Texas Master file, and of those, 315 indicated Direct Patient Care. Of the 315 in Direct Patient Care, 79.7% indicated they were working 40 or more hours a week. One hundred and eighty-two physicians were still identified as Residents, and 81.9% of those indicated they were working 40 or more hours a week.

Of the 88 who moved out of state for a residency program, 33 (37.5%) were back in Texas by 2009. Eighty-four percent had an active license registration status, and 61.4% indicated they were in Direct Patient Care. Twenty-five were still classified as Residents. The median age (in 2009) was 40.5 years. Of those 33 who came back to Texas, 93.9% were in Direct Patient Care with active license registrations, and the median age was 40 years. Only 37.5% of them graduated prior to 2000. For the other 533 Residents who did not leave the state and still held Texas licenses in 2009, 81.2% graduated prior to 2000, and the median age was 41. While inconclusive, this information seems to suggest that recent graduates of medical school were more likely to complete their residency out of state than those who graduated over ten years ago.

Of the 33 residents who left the state for their residency and then moved back to Texas, only 16 had attended a medical school in Texas. And of the remaining 55 physicians who moved out of state to attend a residency program but did not return to Texas, only three of them returned to the state where they attended medical school.

Again, more study would be necessary for conclusive results, but the data here appear to indicate that most of those physicians who completed a residency program in Texas remained in Texas to practice, and most of those who moved out of state for a residency program did not come back to Texas. Recent graduates appear to be more likely to attend a residency program in another state. Half of those physicians were under age 41, meaning that most of them were likely to practice for many more years. Graduation from a Texas medical school did not appear to be a significant factor as to whether a physician who attended an out of state residency program returned to Texas to practice. This illustrates why it is important to "home-grow" physicians.

### Locum Tenens

Table 8 shows the information for those physicians who left Active DPC practice and switched to Locum Tenens status. TheDoctorsCompany (http://www.thedoctors.com) defines the term "Locum Tenens" as referring to a physician who temporarily replaces another physician. By definition, the Latin phrase locum tenens means "one who holds the place of." It refers to a physician who temporarily replaces another physician and therefore cannot be used as additional help, such as opening another operating room or lending an extra hand to deliver a baby. A Locum Tenens physician must always be used as a replacement who substitutes for one physician or one ancillary. For this reason, HPRC does not usually include Locum Tenens physicians in the calculations of active physicians, because they are only temporarily replacing another physician who has likely already been included. Also, the number of Locum Tenens physicians is usually small, and it is not always possible to determine in which county they are practicing, as they often move about.

There is no code on the licensing files to indicate Locum Tenens status. The only way HPRC can determine if a physician is Locum Tenens is if they enter "Locum Tenens" in the Practice Address field. It is possible that other physicians on the file are also Locum Tenens but have not been identified as such because they either left the practice address field blank or entered an actual address.

Including just the complete years of 2002-2009, on average, 0.03% of the Active DPC Physicians switched to Locum Tenens status each year. They were usually predominately male, but there was fluctuation in the numbers. The median ages fluctuated considerably; the only discernable trend is that for most years, at least half of those physicians were age 50 or older. The females were usually, but not always, younger than the males.

Table 8. Exiting Physicians Who Switched to Locum Tenens Status

	2002	2003	2004	2005	2006	2007	2008	2009
Number	26	14	8	12	8	6	6	7
% Male	57.7	78.6	37.5	58.3	50.0	83.3	50.0	85.7
Median Age	35	64	54	50.5	65.5	47	65	61
Median Age Male	34	64	61	51	65.5	49	56	58.5
Median Age Female	36	49	34	50	61.5	35	66	61
% of Total DPC	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# Who also Moved Out of State	1	1	0	1	0	0	0	NA
# who Remained Locum Tenens the Following Year	15	8	4	8	6	5	6	NA

From 2002-2008, only three of the eighty physicians who indicated "Locum Tenens" also moved out of state (at the time this report was prepared, data for 2010 were not available; therefore, for those physicians who were Locum Tenens in 2009, their status in 2010 could not be determined). Of those 80 physicians, 52 (65%) remained Locum Tenens the following year. Only two of those eighty physicians returned to Active DPC Practice and then went back to Locum Tenens practice during the time period analyzed.

For comparison purposes, HPRC analyzed all of the Locum Tenens physicians who were practicing in Texas from 2003 to 2009. Out of 328 Locum Tenens physicians, 124 were on Locum Tenens status for the entire period (seven years), 13 were on Locum status for six years, 17 were on Locum status for five years, 22 were on Locum status for four years, 22 were on Locum status for three years, 38 were on Locum status for two years, and 92 were on Locum status for only one year of the study. For those who were on Locum Tenens status for multiple years, those years were usually consecutive; there does not seem to be a widespread occurrence of physicians leaving active practice for Locum Tenens practice, then returning to Active practice, then returning to Locum Tenens practice - at least not within such a short period of time as seven years. HPRC studied some of the older files to further determine how long these physicians were on Locum Tenens status; further analysis showed that the "average" Locum Tenens physician maintained that status for 4.4 years, usually consecutive. Of the 321 physicians who

were on Locum Tenens status at some point from 2003-2008, only 68 (21.2%) were in Active DPC practice in 2009. Another 153 were still Locum Tenens in 2009, which leaves 100 with a different non-active status.

Table 9 shows the numbers of Locum Tenens physicians by specialty for the 87 physicians who left the Active DPC workforce from 2000-2009. Family Practice and Pediatrics were the top two specialties chosen by those physicians.

**Table 9. Exiting Locum Tenens by Specialty** 

Specialty	Number	Percent
Family Practice	21	24.1
Pediatrics	11	12.6
Anesthesiology	8	9.2
Radiology/Diagnostic Radiology	8	9.2
Emergency Medicine	6	6.9
Internal Medicine	6	6.9
Psychiatry	6	6.9
General Practice	4	4.6
General Surgery	4	4.6
Obstetrics and/or Gynecology	3	3.4
Occupational Medicine	2	2.3
Pathology	2	2.3
Cardiovascular Diseases	1	1.1
Neonatal-Perinatal Medicine	1	1.1
Ophthalmology	1	1.1
Orthopedic Surgery	1	1.1
Radiation Oncology	1	1.1
Therapeutic Radiology	1	1.1
Total	87	100.0

This was not intended to be a comprehensive study of Locum Tenens physicians, and more analysis would be needed to verify the information above over a longer period of time. The conclusion that HPRC has drawn is that most Locum Tenens physicians remain Locum Tenens for several years, and only a small percentage return to Active DPC practice immediately after leaving Locum Tenens status; therefore, if a physician is lost due to switching to Locum Tenens status, that physician *may* re-enter the Active workforce at some later date but it will likely be several years.

### Retired

For the following information on Retired physicians, only the years of 2002-2009 were analyzed because the data for 2000 and 2001 were not complete and may skew the results. On average, only 0.06% of the Active DPC Physicians retired each year. It may be that more retired but indicated it in another way, such as entering "Not In Practice" in the Practice Address field, as several hundred physicians do each year. Table 10 shows the information for those physicians who indicated "Texas Retired" as their License Status, or who entered "Retired" in the Practice Address field.

Table 10. Exiting Physicians who Retired

	2002	2003	2004	2005	2006	2007	2008	2009
Number	25	19	18	25	21	20	26	13
% Male	80.0	94.7	88.9	88.0	57.1	85.0	92.3	92.3
Median Age	63	68	68.5	71	56	71.5	69.5	75
Median Age Male	64.5	69	68.5	71	58	73	69.5	74
Median Age Female	63	58	69	54	51	67	57.5	79
% of Total DPC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
# Who also Moved Out of State	0	1	1	0	12	1	3	0

From 2002-2009, 10.7% of those physicians who indicated "Retired" also moved out of state. This percentage may be understated, as physicians who indicated "Not In Practice" may have also retired. It is unknown why an unusually large number of retirees moved out of state in 2006; anecdotally, it was thought that this may partially be accounted for by physicians who came to Texas from Louisiana after Hurricane Katrina (late August 2005) and who then moved back to Louisiana after they retired, but only one of the twelve physicians indicated a move to Louisiana; several different states were included.

The retiring physicians were predominately male, peaking in 2003 at 94.7%. This may be expected, as the overall workforce has been predominately male. However, the percentage of new physicians entering the workforce who are female has been increasing each year, so it can be expected in the future that the percentage of retirees who are female will also increase. The median ages fluctuated from year to year, with the median retirement ages for females usually being substantially lower than that for males.

The median age of retiring physicians was 67 years, meaning that half of those physicians retired before age 67 and half retired after age 67. The median age for males was 69, and the median age for females was 58. The average age for retiring physicians was 66.8 years; the average age for males was 68.4, and the average age for females was 58. This information was important to determine, as it is necessary for conducting workforce forecasting. If females do indeed retire on average ten years earlier than males, and the workforce is becoming increasingly female, the result may be lower retirement ages in the future than they have been in the past, and this will necessitate an increase in the supply of physicians entering the workforce to offset these increased retirements.

HPRC also analyzed retirement age by specialty for the specialties that lost at least five physicians during the last decade (Table 11). The profession with the highest percentage of females, Pediatrics, had significantly lower average retirement ages than the other professions, further suggesting that females retire at a younger age than males. Therefore, this would need to be taken into account when conducting workforce forecasting, as the specialties with large percentages of females may have much lower average retirement ages than specialties that are predominately male.

Table 11. Retirements by Specialty

Specialty	Number	% of Total Retirees	Average age	% Female
Radiology/Diagnostic Radiology	19	11.4	67.5	15.8
Psychiatry	17	10.2	67.0	23.5
Family Practice	16	9.6	68.7	12.5
General Practice	16	9.6	76.6	0.0
Obstetrics and/or Gynecology	12	7.2	65.8	16.7
Pediatrics	11	6.6	56.2	45.5
General Surgery	9	5.4	66.2	11.1
Pathology	9	5.4	66.9	22.2
Internal Medicine	8	4.8	67.1	25.0
Anesthesiology	6	3.6	65.7	0.0
Emergency Medicine	5	3.0	63.8	0.0
Orthopedic Surgery	5	3.0	70.2	0.0

### Deceased

Table 12 shows the information for those physicians who died from 2002-2009. On average, 77 Active DPC physicians died each year. Those physicians were overwhelmingly male; although the percentage of female physicians increases each year, the profession has traditionally been predominately male, therefore the females skew towards the younger ages, so it is not surprising that a higher percentage of males would be older.

Table 12. Exiting Physicians who Died

	2002	2003	2004	2005	2006	2007	2008	2009
Number	73	85	79	91	72	61	78	75
% Male	93.2	92.9	92.4	93.4	90.3	88.5	85.9	94.7
Median Age	68	69	67	67	67	67	66	66
Median Age Male	69	69	69	68	69	68.5	67	66
Median Age Female	48	63.5	52	62.5	50	50	59	56.5
% of Total DPC	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2

### **Exiting Physicians who Returned to Active Practice**

There were several factors, such as multiple reasons for leaving, that made the analyses difficult, and some determinations had to be made by judgment call. To help complete the picture of what is happening with those physicians leaving the workforce, individual records were examined to see if any of those who left the workforce re-entered at some point later in the decade. Among other reasons, this could include those physicians who took extended leave for childbirth, sabbaticals, or further training. A surprising number of physicians who left the Active DPC workforce in the last decade returned at some point during that decade. Some left and returned more than once. In some cases, this may not have been what actually occurred, but coding or other errors on the licensing files may have caused a physician to be excluded from the Active DPC file for just one

year, which would have caused that physician to be included in this study as an "Exiting Physician." However, those occurrences should be minimal.

Summing up all of the physicians who left each year from 2000 to 2009, it would appear that Texas lost 17,720 Active DPC Physicians. However, 1,199 (6.8%) returned to Active DPC practice in Texas during the study period and then left again, and 37 of those returned a second time and then left a third time. Two others returned a third time and then left for a fourth time, all during the ten-year study period. Therefore, only 16,441 physicians were actually lost (or exited) during the study period. Since those physicians were considered "New Physicians" each time they returned, the numbers in the previous report, *Characteristics of New Physicians in Texas 2000-2009*, were slightly overstated as well (http://www.dshs.state.tx.us/CHS/HPRC/NewPhys.pdf).

Some of the physicians who left Active DPC practice and then returned listed multiple reasons for leaving, but the primary reasons were:

- Teaching 34.4%
- Not in Practice 18%
- Moved out of state 10.1%
- Administrative 6.9%
- Public Health Service 5.5%
- Research 3.9%
- Resident 3.9%
- Locum Tenens 2.6%
- VA 2.4%
- Military 1.5%
- Deceased 1.1%
- Retired 0.4%

The rest had miscellaneous reasons. The analysis suggests that Teaching is the biggest reason physicians leave the active workforce and then return after a few years, with Not In Practice status being the second most chosen reason. This is not to be confused with the top reasons given for physicians leaving: switching to Not In Practice status or moving out of state; for the most part, those physicians did not return to Active DPC practice during the decade.

Of those 1,199 physicians who left and returned, 68.1% were male. The median age was approximately 50 years (specific median ages could not be calculated as some physicians left more than once at different times/ages), and approximately 58% were between the ages of 35 and 55. The conclusion is that a small portion of the workforce moves between DPC status and non-DPC status multiple times over the course of their careers.

### **Projections**

The purpose of this project was to ultimately determine how the data can be used to make projections of the physician supply in the future; where shortages may occur; and what

types of shortages may occur. HPRC recognizes that the trends displayed in this report can be used to make only general status-quo projections because any trends analyzed in this report may change drastically in the future depending on the outcome of national healthcare legislation. Among other things, the current economic situation may also have an effect on projections.

The next step of the study will be to combine the findings from this report with the findings from the previous report, *Characteristics of New Physicians in Texas*, 2000-2000. With knowledge of the trends of new physicians and those physicians who are leaving, it should be possible to create projections for what can be expected to occur in the physician workforce in the near future.

### **Conclusion:**

The number of Direct Patient Care Physicians in Texas increases virtually every year, and for the most part, so have the supply ratios; however, the ratios increased at a much slower rate during the last decade than they increased during the previous two decades, and while this is partially due to the number of physicians who left the Active DPC workforce in Texas each year, the rapid growth of the population is the largest reason that the supply ratios have been increasing slowly. There are several basic conclusions that can be drawn related to specific indicators, but translating this to a workforce projection is difficult because HPRC does not have sufficient information to determine how all of these factors inter-relate. But based on past trends, HPRC can conclude:

- Texas will lose about five percent of the Active DPC workforce each year (gross loss, not net).
- Physicians born and/or educated in Texas will be more likely to continue to practice in Texas at a later age.
- The percentage of Physicians leaving Hospital settings is greater than the percentage of physicians practicing in a Hospital setting, which may indicate a potential shortage in the future.
- Physicians will leave the rural and border areas in proportions similar to their composition of the overall workforce.
- The median ages of physicians leaving the workforce will increase.
- The Primary Care specialties will likely continue to account for almost half of the Exiting Physicians. For the most part, Texas is losing physicians in Primary Care, Anesthesiology, and Psychiatry; however, the proportions of physicians leaving all specialties mirrors their proportions in the general workforce and does not indicate an unexpected potential shortage for any specific specialty.
- Moving out of state and physicians switching to Not In Practice status will continue to be the two main reasons that Texas loses Active DPC physicians; and, those who move out of state generally have median ages in the low-40s.
- The overall average retirement age for physicians is 66.8.
- Teaching is the main reason physicians leave the Active DPC workforce and then return within a few years.