ANALYSIS OF DESIGNATED DOCTOR EXAMS IN THE TEXAS WORKERS' COMPENSATION SYSTEM 2010 - 2015



TEXAS DEPARTMENT OF INSURANCE WORKERS' COMPENSATION RESEARCH AND EVALUATION GROUP

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Per Chapter 405 of the Texas Labor Code, the Workers' Compensation Research and Evaluation Group at the Texas Department of Insurance is responsible for conducting professional studies and research on various system issues, including:

- the delivery of benefits;
- litigation and controversy related to workers' compensation;
- insurance rates and rate-making procedures;
- rehabilitation and reemployment of injured employees;
- the quality and cost of medical benefits;
- employer participation in the workers' compensation system;
- employment health and safety issues; and
- other matters relevant to the cost, quality, and operational effectiveness of the workers' compensation system.

Information in this report can be obtained in alternative formats by contacting the Texas Department of Insurance.

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EXECUTIVE SUMMARY

In 2011, the 82nd Legislature passed House Bill (HB) 2605, the Division of Workers' Compensation (DWC) Sunset Bill. In addition to authorizing the continuation of DWC, it enacted legislative changes to the DWC Designated Doctor (DD) program and required new and amended DWC rules on the program. DWC manages the DD Program, which trains, tests, and certifies DDs.

A DD is a doctor certified by DWC to resolve questions about an injured employee's medical condition or resolve a dispute about a work-related injury or illness. DDs address issues such as maximum medical improvement (MMI), impairment ratings (IR), extent of injury (EOI), ability to return to work, disability, or other similar issues.

The goal of this study was to examine the impacts of the legislative and rule changes, especially the effects on the distribution of doctors, types of doctors, and their MMI/IR examinations of injured employees, by body part and by geographic regions. MMI/IR exams, which is the focus of this study, represent 77 percent of all exams conducted by DDs. The report does not analyze the adequacy of the current number of DDs or whether the changes by license type resulted in changes in the quality of DD exams.

HB 2605 and the required new and amended rules resulted in dramatic shifts in some measures, but no change in others. The number of DDs and their distribution by license types, as well as their share of exams, changed significantly from 2010 to 2015. However, the results showed only slight changes in the impairment ratings that DDs assigned to injured employees. Similarly, the distribution of DD exams between Rural and Urban counties remained relatively constant and aligned with the distribution of reportable claims among those counties. Further, the decrease in the number of DD exams appeared to be more closely associated with the decrease in the number of reportable claims than with the legislative and rule changes.

DATA AND METHODOLOGY

The time frame of the study (2010 – 2015) covers the exam years immediately before and after the implementation of HB 2605, and DWC's adoption of the new and amended DD rules in 2012 as required by HB 2605. The data consist of injured-employee claims as well as DD appointments and exams, regardless of the date of injury. The research also examined data from the DWC Form-069, *Report of Medical Evaluation* for DD issues of MMI/IR. The study focused on examinations conducted, rather than appointments offered. Federal definitions were used to distinguish between urban and rural counties and seven standard Texas regions were used to study regional changes¹.

OVERVIEW: DESIGNATED DOCTORS AND EXAMS

• From 2010 to 2015 the percentage share of Doctors of Chiropractic (DC) among DDs more than doubled from 20 percent to 49 percent, while the share of Medical Doctors (MD) fell from 70

¹ http://www.texascounties.net/statistics/regions.htm

- percent to 44 percent. The share of Doctors of Osteopathy (DO) decreased from 10 percent to 7 percent during the same period.
- The total number of exams conducted by MDs and DOs fell by 58 percent and 55 percent from 2010 to 2015. However, the number of exams conducted by DCs increased significantly during the same period.
- The average number of exams per DC increased tenfold, from three in 2010 to 31 in 2015. The
 average number of exams for MDs (35 in 2010) and DOs (38 in 2010) decreased moderately after
 2010, but by 2015 were 32 exams per MD and 36 exams per DO.
- The body part most frequently examined by DCs was the low back. For MDs and DOs, the most frequently examined body part was multiple-body-parts.
- In 2010, MDs had the highest average number of exams for all the body parts, but by 2015 they
 had the highest average for just one body part, shoulder and upper arm. DOs had the second
 highest average number of exams for all body parts in 2010, but the highest for most of the body
 parts in 2015. In 2015, DCs had the highest average number of exams for low back, but the
 lowest for the other body parts.
- The median IRs among the license types were consistent for three of the body parts during the pre-HB 2605 timeframe, and with four of the body parts after the implementation of the new rules. MDs and DOs assigned higher IRs for knee and shoulder-upper arm injuries than did DCs, but those differences may be the result of differences in injury severity.
- During 2010 2015, rural counties typically had 14 percent of lost-time claims and 13 percent of the DD exams.
- As a percentage share of DD exams in rural counties, DC exams increased from 2 percent in 2010 to 51 percent in 2015, while MD exams fell from 77 percent to 37 percent, and DO exams fell from 21 percent to 12 percent.
- As a percentage share of DD exams in urban counties, DC exams increased from 2 percent in 2010 to 49 percent in 2015, while MD exams fell from 86 percent to 45 percent, and DO exams fell from 12 percent to 6 percent.
- In all seven Texas regions, the share of MD and DO exams fell, and the share of DC exams increased dramatically especially after HB 2605 and the required new and amended DWC rules. Overall, DCs had the largest share of DD exams, except in the High Plains where MDs had a slightly higher percentage than DCs.
- The number of DD exams and the number of reportable claims decreased for most of 2010 2015, but the decreases began even before the passage of HB 2605.

I. INTRODUCTION

A DD is a doctor certified by DWC to resolve questions about an injured employee's medical condition or resolve a dispute about a work-related injury or illness. DDs address issues such as MMI, IR, EOI, ability to return to work, disability, or other similar issues. When there are issues with a claim, the injured employee, an injured employee's representative, insurance carrier, or DWC can request a DD examination. DWC determines if a DD should be appointed to conduct that exam, which will only address those issues in question.

In their role, DDs do not provide medical treatment to injured employees or make determinations about the type of medical treatment that is appropriate for the injured employee's claim. DD decisions have presumptive weight in benefit review conferences (BRC) and contested case hearings (CCH), but according to the Texas Labor Code, the presumptive weight can be overcome by a preponderance of the evidence to the contrary (Texas Labor Code §408.1225(c)).

HB 2605 AND NEW RULES

In 2011, the 82nd Texas Legislature passed HB 2605, the DWC Sunset Bill. In addition to approving the continuation of DWC, the bill required new rules for DD training, testing, certification, and exams. These changes were aimed at addressing the Sunset Advisory Commission's concerns that the DD process did not adequately ensure DD exams were consistent and of high quality. The bill, which adopted a majority of the recommendations from the Sunset Advisory Commission, mandated the development of rules requiring DDs to remain on a claim unless authorized by DWC to be removed, and granted DWC the authority to refuse the renewal of DD certifications. In addition, the new and amended rules, as directed statutorily by HB 2605, require that DDs be selected based on an injured employee's current "diagnosis or diagnoses" and "the part of the body affected by the injury". Prior to this, DDs were selected based on the injured employee's current medical condition and type of health care they were receiving.

The bill further provides that if an injured employee disagrees with their DD opinion, they can request an MMI/IR exam from their treating doctor or from a doctor referred by their treating doctor.

DWC implemented these new and amended rules (28 Texas Administrative Code (TAC), Chapter 127) effective September 1, 2012, with some provisions delayed until January 1, 2013. The rules require training, certification, qualification, and testing of all DDs to assess their proficiency and ability to perform their specific statutory duties. The rules further implemented new forms, applications, and data reporting requirements to increase the efficiency of the program.

These new and amended rules now require that DDs perform exams in facilities properly equipped and currently used for medical exams or other similar health care services. The facility must also ensure the safety, privacy, and accessibility of injured employees' medical records and other records containing confidential claim and medical information.

A DD is also required to be physically present in the same room as the injured employee for the DD exam or any other health care service provided to the injured employee. An exception is when the DD makes a referral to another health care provider to perform additional testing.

DDs are also required to apply the appropriate edition of the American Medical Association *Guides to the Evaluation of Permanent Impairment,* (currently the Fourth Edition), and return-to-work guidelines

adopted by DWC. The DD must also consider treatment guidelines that have been adopted by DWC and other evidence-based medicine when appropriate.

DESIGNATED DOCTOR CERTIFICATION TRAINING

To become certified as a DD, a doctor must first be licensed in Texas, have an active practice for three years, and own or subscribe to the appropriate edition of the American Medical Association *Guides to the Evaluation of Permanent Impairment*, MDGuidelines (DWC's return-to-work guidelines), and Official Disability Guidelines (DWC's treatment guidelines). Once doctors meet these basic requirements, they must also complete specified DWC training and testing every two years to apply for recertification. The training courses cover administrative requirements, how to use the guidelines, and how to conduct musculoskeletal exams and review cases for determining MMI and IR.

DISQUALIFYING ASSOCIATIONS

According to 28 TAC §127.140, a disqualifying association is any association that may reasonably be perceived as having potential to influence the conduct or decision of a designated doctor. DDs are prohibited from performing exams on injured employees who are within the same workers' compensation health care network as the DD. In addition, they may not provide treatment or perform other exams or reviews (required medical exams, utilization reviews, peer reviews) on a claim to which the doctor has already been assigned as a DD.

Disqualifying associations also include:

- receipt of income, compensation, or payment of any kind not related to health care provided by the doctor;
- shared investment or ownership interest;
- contracts or agreements that provide incentives such as referral fees or payments based on volume or value, and waiver of beneficiary coinsurance and deductible amounts; or
- contracts or agreements for space or equipment rentals, personnel services, management contracts, referral services, billing services agents, document management or storage services or warranties, or any other services.

The goal of this study is to examine what impacts HB 2605 and its required new and amended rules, had on trends in the DD program, especially trends related to the number of doctors, types of doctors, and their MMI/IR exams to evaluate injured employees. To that purpose, this study covers exam years 2010 – 2015, the years immediately before and after implementation of HB 2605 and the rules that followed.

II. DESIGNATED DOCTORS

The DWC Sunset bill, HB 2605 mandated new and amended rules for certification, testing and training of DDs to address the Texas Sunset Advisory Commission's concerns about the DD program. In addition to authorizing the continuation of DWC, it also required the development of new and amended rules, and granted DWC the authority to refuse renewal of DD certifications.

The primary DD license types are MD, DO, and DC). A Doctor of Podiatry, Doctor of Dental Surgery, or Doctor of Optometry may also conduct DD exams. However, given the rarity of exams by these three doctor types, they are included with MDs for the purpose of this report.

DESIGNATED DOCTORS BY LICENSE TYPE

Overall, the total number of DDs peaked at 1,308 in calendar year 2013, but by 2015, it fell to 850, the lowest number in the six years studied (see Table 2.1). Reductions in the number of MD and DO DDs contributed to that trend. While the number of DOs decreased steadily after 2011, the number of MDs increased until 2013, then decreased sharply in 2014 and 2015, when the new rules first impacted existing DDs who needed to recertify. The number of DCs followed a different pattern. The number of DCs decreased slightly from 2010 (238) to 2012 (194), but that number increased to more than 400 in 2014 and 2015. However, the decreases in the number of DOs and MDs exceeded the increases in the number of DCs. The net overall change was a decrease in the total number of DDs after 2013. Initial decreases in total DDs were anticipated after HB 2605, given the new rules for certification, testing, and training. It was also anticipated that some doctors might not pass the new test, and would therefore require additional training and testing.

Table 2.1: Number of Designated Doctors, by Exam Year

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|--|-------|-------|-------|-------|-------|-------|
| Exam Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015* |
| DC | 238 | 231 | 194 | 276 | 453 | 417 |
| DO | 118 | 124 | 113 | 104 | 78 | 55 |
| MD | 832 | 873 | 879 | 928 | 610 | 378 |
| Total | 1,188 | 1,228 | 1,186 | 1,308 | 1,141 | 850 |

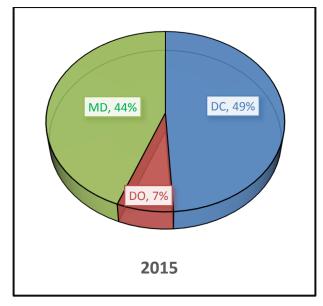
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note*: As of 2017, the number of designated doctors stood at 595.

As a percentage share of all DDs, MDs decreased sharply from 70 percent in calendar 2010, to 44 percent in 2015 (see Figure 2.1). During the same timeframe, the share of DCs, as a percentage of all DDs more than doubled from 20 percent to 49 percent, while the share of DOs fell from 10 percent to 7 percent. The most significant change after HB 2605 was the rapid increase in the share of DCs as DDs.

DC, 20%
DO, 10%
2010

Figure 2.1: Change in Distribution of Designated Doctors by DD Type 2010-2015



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

DESIGNATED DOCTOR EXAMS BY LICENSE TYPE

The number of MMI/IR exams by license type followed a different pattern than the number of DDs by license type. While the total number of DDs fluctuated across the first four years of the study timeframe, the total number of exams decreased steadily. Also, while the number of DDs decreased during the last two years of the study, the total number of exams increased. The total number of exams fell 29 percent, from almost 34,000 in 2010 to about 24,000 in 2013, but increased to more than 26,000 in 2015 (see Table 2.2).

The number of exams conducted by MDs decreased in four of the six study years. By 2015, the number of those exams had fallen from the 2010 level by 58 percent (from 28,719 to 11, 935). Similarly, the number of exams by DOs fell 55 percent (from 4,451 to 2,001). However, the number of DD exams conducted by DCs increased by a factor of 17, from the lowest number of exams among the license types (754 in 2010) to the highest number of exams (12,812 in 2015). The largest of these increases occurred in 2013, after the initiation of the new and amended rules under HB 2605. By 2014, MDs accounted for the second highest number of exams and DOs for the lowest. Interestingly, the decrease in the total number of exams began even before the implementation of HB 2605 and the required new DD rules. The number of DD exams fell by 11 percent from 2010 to 2011.

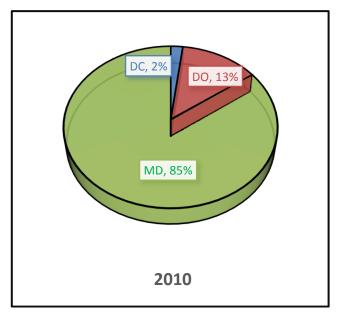
Table 2.2: Number of Designated Doctor Exams Involving MMI/IR Issues by DD Type Exam Years 2010 - 2015

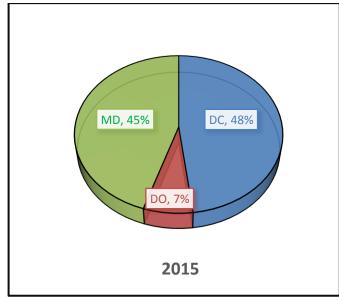
| Exam Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------|--------|--------|--------|--------|--------|--------|
| DC | 754 | 812 | 302 | 8,325 | 11,750 | 12,812 |
| DO | 4,451 | 3,624 | 3,029 | 1,962 | 1,806 | 2,001 |
| MD | 28,719 | 25,807 | 26,279 | 13,846 | 11,184 | 11,935 |
| Total | 33,924 | 30,243 | 29,610 | 24,133 | 24,740 | 26,748 |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

MDs accounted for 70 percent of the DDs and 85 percent of the exams in 2010 (see Figure 2.2). However, by 2015, MDs made up 44 percent of DDs and 45 percent of the exams. Interestingly, in 2010, DCs comprised 20 percent of the DDs but only 2 percent of the exams. By 2015, DC participation as DDs underwent rapid expansion, in both the number of DDs and number of exams. In that year, they comprised 49 percent of the DDs and conducted 48 percent of the exams. Over the same period, the number of DOs fell proportional to the number of exams. In 2015, they accounted for 7 percent of both the number of DDs and the number of exams.

Figure 2.2: Change in Distribution of Designated Doctor Exams, by License Type Exam Years 2010-2015





AVERAGE NUMBER OF EXAMS BY LICENSE TYPE

Prior to the implementation of HB 2605 and the required new and amended rules, DCs had the lowest average number of DD exams per doctor (see Figure 2.3). However, the average number of exams by DCs increased ten-fold, from three in 2010 to 31 in 2015. Meanwhile MDs and DOs experienced significant reductions in their average number of exams by 2013. The average number of exams by MDs fell steadily in the first four years of the study timeframe (from 35 in 2010 to 15 in 2013). That trend reversed in 2014, and by 2015 the average number of exams for MDs was up to 32. The average for DOs followed a similar pattern, decreasing in the early years of the study (from 38 in 2010 to 19 in 2013), and increasing to 36 by 2015, the highest average among the doctor types.

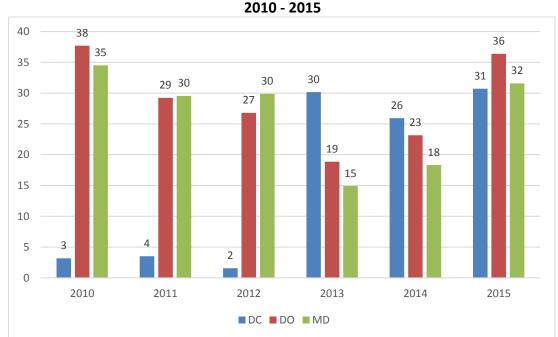


Figure 2.3: Average Number of Designated Doctor Exams, by License Type 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

In 2010, DCs accounted for the second lowest number of DDs, the lowest number of exams, and the lowest average number of exams per doctor among the three key license types. But by 2015, they comprised the highest number of DDs, the highest number of exams, and a comparatively high average number of exams per DC. In 2015, MDs accounted for the second largest number of DDs, the second highest number of exams, and the second highest average number of exams per doctor. DOs had by far the lowest number of doctors, the lowest number of exams, but the highest average number of exams per doctor.

Clearly, the most significant changes in the number of DDs by doctor type, as well as their average number of exams, occurred after the HB 2605-mandated changes in 2011 and 2012. The impact of the required amended and new rules varied by doctor type. The number of DCs and their average number of exams increased steeply. The number of MDs and DOs decreased, but the remaining active MDs and DOs continued to hold the average number of exams at the levels held before the new rules. Overall, the decrease in the number of MDs and DOs in the DD program was partially replaced by the increased number of DCs. The relatively high average number of exams per DD for all three doctor types also

supported the total number of exams. The next section will study the participation rates of these doctor types depending on the injured body parts they examined.

III. DESIGNATED DOCTOR EXAMS: DISTRIBUTION BY BODY PART

Current rules, in accordance with HB 2605, require that DDs be selected based on an injured employee's current "diagnosis or diagnoses" and "the part of the body affected by the injury" rather than the injured employee's current medical condition and type of health care the injured employee received at the time of the DD selection.

Effective January 1, 2013, the qualification standards as defined by rule are based on 15 body parts and diagnoses listed on the DWC Form–032, *Request for Designated Doctor Examination*. However, since this requirement and available data were only available after 2012, this study used the body part from the first report of injury sent to DWC by the insurance carriers. This section looks at the distribution of injured body parts by the examining DD license types for exam years 2010 - 2015. For ease of analysis, all body parts were categorized into five major groups and one combination group for the other low-frequency body parts. Some changes in body part and diagnosis could occur after the first report of injury.

EXAMS BY BODY PART

Overall, about 64 percent of the total number of DD exams were for the five most frequent body part categories, while the remaining body parts were grouped as Others (see Table 3.1). The share of exams for Wrist/Hand/Finger body part grew from 12 percent in 2010 to 14 percent in 2015, while the share for Multiple Body Parts decreased from 21 percent to 13 percent over the same time frame. Low Back experienced slight decreases while Others showed moderate increases in the share of DD Exams.

Table 3.1: Percentage of Exams, by Body Part 2010-2015

| 2010 2013 | | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Body Part | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Knee | 11% | 12% | 12% | 12% | 13% | 12% | |
| Low Back | 14% | 14% | 14% | 13% | 12% | 12% | |
| Multiple Body Parts | 21% | 20% | 18% | 16% | 13% | 13% | |
| Shoulder Upper Arm | 11% | 11% | 11% | 12% | 13% | 13% | |
| Wrist Hand Finger | 12% | 12% | 13% | 13% | 14% | 14% | |
| Others * | 31% | 32% | 32% | 33% | 35% | 36% | |
| TOTAL | 100% | 100% | 100% | 100% | 100% | 100% | |

Note *: In 2015, Others was comprised of Ankle-tarsals, Foot (metatarsals, heel, Achilles tendon), and Lower Leg (tibia, fibula, and corresponding muscles). Percentage may not total to 100 % due to rounding.

EXAMS BY DESIGNATED DOCTORS

More than 50 percent of all DD examinations by DCs from 2010 to 2015 were for four body parts, the most frequent of which was Low Back (See Figure 3.1). More than 50 percent of all DD exams by DOs and MDs for the same years were for five body parts, the most frequent of which was for Multiple Body Parts. Between 37 percent and 41 percent of the exams by the three DD doctor types were for the Others body parts.

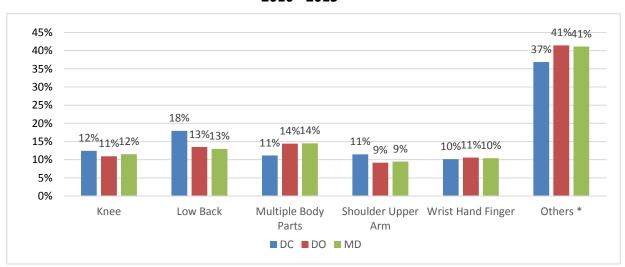


Figure 3.1: Percent of MMI/IR Exams by Designated Doctors, by Body Part 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note *: For DCs, the Others group includes: Whole Body; Lower Leg (tibia, fibula and corresponding muscles); Whole Body Part; and Lower Arm (forearm - radius, ulna, and elbow - radial head). For DOs, the Others group includes: Foot (metatarsals, heel, Achilles tendon); Lower Arm (forearm - radius, ulna); and Lower Leg (tibia, fibula and corresponding muscles). For MDs, the Others group includes: Foot (metatarsals, heel, and Achilles tendon); Lower Leg (tibia, fibula and corresponding muscles); and Upper Arm (humerus and corresponding muscles). Percentages may not total 100 % due to rounding.

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - LOW BACK

For low-back injuries, the average number of DD exams per DC fluctuated between 2010 and 2012, but increased from two in 2012 to 10 exams in 2013 (see Figure 3.2). The timing of this increase, as with the previous trends, aligned with the DWC implementation of new rules as required under HB 2605. MDs had the highest average number of exams in 2010 (17 exams), but by 2015 they had the lowest average (seven exams). DOs, on the other hand, experienced a steady decrease in the average number of exams, from 16 in 2010 to eight in 2015. Not surprisingly, the most significant changes occurred in 2013. While DCs had the lowest average number of DD exams for Low Back during the first three years of the study, they had the highest average among the license types during the last two years of the study.

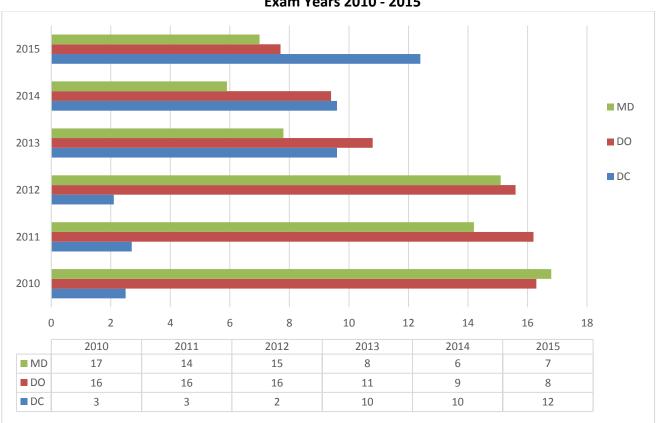


Figure 3.2: Average Number of Designated Doctor Exams, Low Back Exam Years 2010 - 2015

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - MULTIPLE BODY PARTS

The average number of DD exams by DCs for Multiple Body Parts decreased slightly between 2010 and 2012, but more than quadrupled from two in 2012 to nine in 2013 (see Figure 3.3). The timing of this increase is again associated with the implementation of the required new and amended rules under HB 2605. MDs had the highest average number of exams in 2010 (23 exams), but the second highest (14 exams), by 2015. DOs had the second highest average in 2010, but the highest in 2015. Both MDs and DOs experienced about a 50 percent drop in the average number of exams in 2013. Despite this, DCs had the lowest average number of exams among the license types across all the study years for Multiple Body Parts.

Exam Years 2010 - 2015 MD DO DC

Figure 3.3: Average Number of Designated Doctor Exams, Multiple Body Parts

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - KNEE

DCs had a low but stable average number of DD knee exams from 2010 to 2012 (two exams on average). However, that jumped to nine exams per DD in 2013, and decreased just slightly in 2014 and 2015 (see Figure 3.4). MDs had the highest average from 2010 to 2012, when it was as high as 21 exams. This fell sharply in 2013 to seven, but increased to 14 exams by 2015. The average number of exams for DOs fluctuated between 2010 and 2012, followed by a significant decrease in 2013. However, DOs in 2015 had the highest average number of knee exams, at 17 exams per DD. DCs had the lowest average number of exams for the Knee body part for five of the six study years.

MD DO DC MD DO DC

Figure 3.4: Average Number of Designated Doctor Exams, Knee Exam Years 2010 - 2015

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - WRIST/HAND/FINGER

DCs averaged two exams per DD from 2010 to 2012 for the Wrist/Hand/Finger body part. However, that average increased to nine exams in 2013 (see Figure 3.5). The average number of exams by MDs and DOs decreased in 2013, but more than doubled by 2015. The average for MDs increased from seven in 2013, to 16 exams in 2015. Likewise, the average number of exams for DOs increased from nine in 2013, to 28 in 2015. This suggests that the remaining DOs and MDs were doctors that were more active and available to conduct those exams than those that were no longer active. Despite the increase in the average for DCs in 2013, they had the lowest average for five of the six study years.

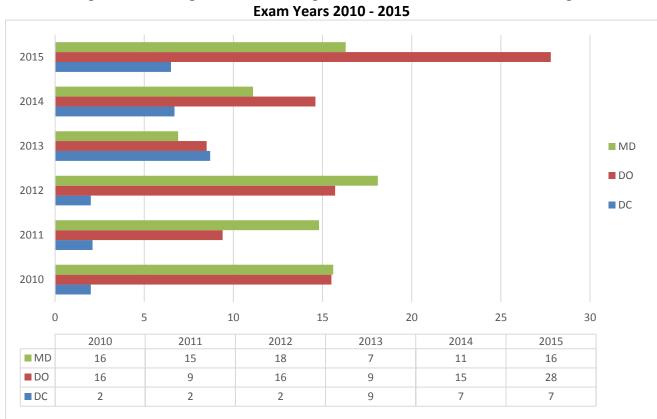


Figure 3.5: Average Number of Designated Doctor Exams, Wrist/Hand/Finger

Fxam Years 2010 - 2015

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - SHOULDER AND UPPER ARM

MDs had the highest average number of exams for the Shoulder and Upper Arm body part for four of the six study years, but this fell most significantly in 2013, when DCs had the highest average (see Figure 3.6). By 2015, MDs again had the highest average number of exams for the Shoulder and Upper Arm body part, just slightly above DOs. Across the study years, DCs had the lowest average except in 2013, when that number increased more than four-fold, from two to nine exams per DD.

MD DO DC MD DO DC

Figure 3.6: Average Number of Designated Doctor Exams, Shoulder and Upper Arm Exam Years 2010 - 2015

AVERAGE NUMBER OF DESIGNATED DOCTOR EXAMS BY LICENSE TYPE - OTHER BODY PARTS

Among the license types, MDs had the highest average number of exams for Other body parts in 2010, but the second highest average for the remaining years (see Figure 3.7). The average number of exams for MDs in 2015 (43 exams) was the highest for MDs across the study years. DOs had the highest average for five of those six years. The average in 2015 (57 exams) was the highest across the study years for DOs and the highest for all other license types for the study period. DCs had the lowest average number of exams for the entire study period, despite the significant increase from 2012 to 2013. The average number of exams for DCs increased from two in 2012 to 18 in 2013 and remained above 16 for the following two years. Yet, DCs continued to have the lowest average number of exams by license type.

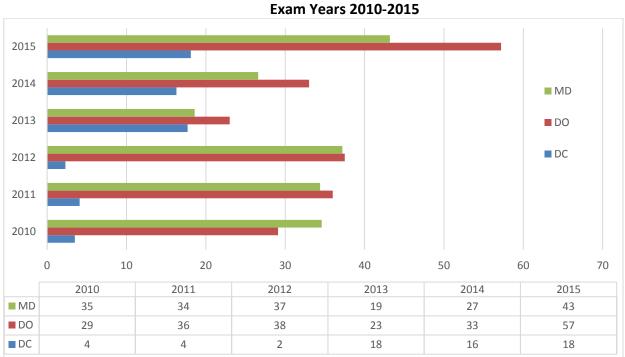


Figure 3.7: Average Number of Designated Doctor Exams, Other Body Parts

Fxam Years 2010-2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Overall, while HB 2605 and the required new rules resulted in a major increase in the number of DCs in the DD program, they tended to have the lowest average number of exams for most of the body parts. The one notable exception was for exams of the Low Back area in 2014 and 2015. DOs had the highest average number of exams across the study years, while also having the lowest number of DDs for five of the six study years. The next section examines the IRs that DDs assign to injured employees.

IV. IMPAIRMENT RATINGS BY LICENSE TYPE

DDs are expected to conduct examinations for which they are qualified based on their license, board certification, and within their scope of practice. Effective January 1, 2013, the selection standards as directed by HB 2605 and defined by rule for DD exams are based on 15 body parts and diagnoses listed on the DWC Form—032, *Request for Designated Doctor Examination*. Since complete data based on this form are only available after 2012, this study instead used the body part information derived from the insurance carrier's first report of injury to DWC for exam years 2010 - 2015.

However, analyses based strictly on body part, without considering the diagnosis code, could show IR variations by license type. For example, a DC might examine an injured employee's Wrist/Hand/Finger area for a musculoskeletal injury, while an MD might examine the same body part on another injured employee for a burn. Both injuries would be characterized by different injury nature, diagnosis, and severity.

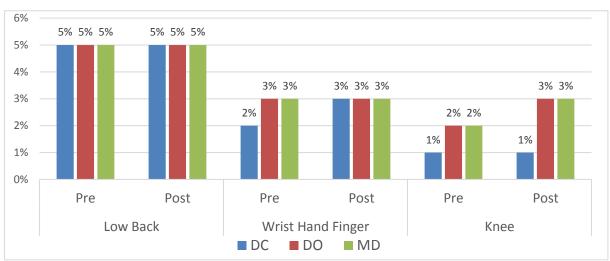
Further, follow-up exams and testing after the injury may lead to changes in the initial body parts and diagnoses, from the date of the first report of injury to the date of the DD exam.

The relatively low number of DD evaluations by DCs from 2010 to 2012 also made the pre-HB 2605 IR averages subject to outliers, and to unreliable results. This was especially so with IRs where the mode, or most frequently assigned rating, was 0 percent. Outliers were as high as 100 percent. The median therefore represented a more accurate depiction of the DD IRs. Even then, the low number of DC IRs by body part made it necessary to combine the three years before, and the three years after the implementation of the HB 2605 changes. This section examines IRs for body parts, by license type, for the combined years 2010 - 2012 and 2013 - 2015.

The median IR for the Low Back body part, assigned before (pre) and after (post) the implementation of HB 2605 and its required new and amended rules, remained unchanged for each of the license types (see Figure 4.1). Except for the one-point IR increase by DCs for Wrist/Hand/Finger injuries, the rating remained unchanged. The IRs assigned by MDs and DOs for knee injuries increased from 2 percent to 3 percent, while DC IRs remained at 1 percent.

Figure 4.1: Median Impairment Rating by Body Part and License Type Low-Back, Wrist/Hand/Finger, and Knee

Exam Years 2010 – 2015

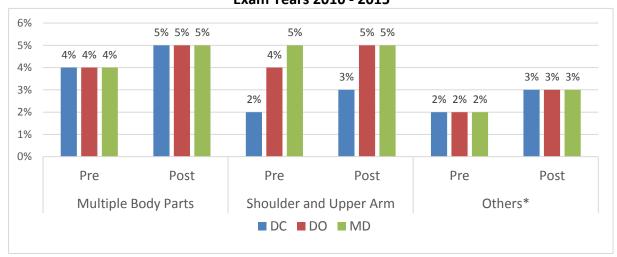


Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

The median IR for Multiple Body Parts increased for the three license types from 4 percent to 5 percent after the implementation of the HB 2605 changes (see Figure 4.2). Likewise, the median impairment rating for the Others increased from 2 percent to 3 percent for all three DD types. The median IR for the Shoulder and Upper Arm body part increased by 1 percentage point for both DCs and DOs, but remained unchanged for MDs at 5 percent, the highest for that group.

Figure 4.2: Median Impairment Rating by Body Part and License Type Multiple Body Parts, Shoulder and Upper Arm, and Others

Exam Years 2010 - 2015



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note: * In 2015, Others was comprised of Ankle-tarsals, Foot (metatarsals, heel, Achilles tendon), and Lower Leg (tibia, fibula, and corresponding muscles). Overall, IRs among the license types were the same for three of the body parts during the pre-HB 2605 timeframe, and for four of the body parts after the implementation of the new rules required by HB 2605. MDs and DOs assigned higher IRs for the Knee, and Shoulder and Upper Arm body parts than did DCs. As pointed out earlier, these differences could be explained by different injury nature, diagnosis, or severity of the injuries. It appears that the implementation of HB 2605 and its required rule changes did not result in any significant changes in overall IRs for injured employees. The next section will examine if the 2011 statutory and rule changes had any geographic implications for DD exams.

V. DESIGNATED DOCTOR EXAMS BY REGION

This section examines any potential regional impacts HB 2605 and the new required rules might have had on the distribution of DDs and DD examination trends across Texas, both by the Rural and Urban status of the counties and by geographic regions.

RURAL AND URBAN COUNTIES

Based on federal definitions, Texas has 191 rural counties and 63 urban counties. According to the Texas Demographic Center, rural counties account for 15 percent of the state's population during the years 2010 - 2015.² The Rural counties also account for a slightly lower share of workers' compensation reportable claims³ (see Table 5.1). The population of reportable claims provide the overwhelming majority of injured employees who receive DD examinations. Rural counties had 14 percent of the reportable claims in four of the six study years, and 13 percent for the remaining two years. Interestingly, even as the number of reportable claims fell steadily, the percentage shares by Rural and Urban status remained stable.

Table 5.1: Percentage Share of Reportable Claims
Rural and Urban Counties
Exam Years 2010 - 2015

| Injury Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-------------|--------|--------|--------|--------|--------|--------|
| Down | 13,909 | 13,833 | 13,635 | 12,084 | 12,957 | 11,590 |
| Rural | (14%) | (14%) | (14%) | (13%) | (14%) | (13%) |
| Lirban | 85,442 | 84,973 | 83,761 | 80,867 | 79,596 | 77,563 |
| Urban | (86%) | (86%) | (86%) | (87%) | (86%) | (87%) |
| Total | 99,351 | 98,806 | 97,396 | 92,950 | 92,553 | 89,153 |
| Total | (100%) | (100%) | (100%) | (100%) | (100%) | (100%) |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note*: The federal government uses two primary definitions for Rural, one by the U.S. Census Bureau and the other by the Office of Management and Budget. Both generally define Rural as less than 50,000 in population. By this definition, 191 Texas counties are rural and 63 are urban. About 15 % of the state's population resided in rural counties during 2010 – 2015.

When the percentage share of reportable claims was compared to the share of DD exams by Rural and Urban status, the difference was indiscernible for most of the study years (see Table 5.2). In 2010, the percentage share of DD exams in Rural counties (11 percent) was lower than the share of reportable claims (14 percent). However, the reverse occurred in 2013, when the percentage share of DD exams (14

Texas Department of Insurance I www.tdi.texas.gov

² The Texas Demographic Center produces and disseminates population estimates and projections for Texas (http://txsdc.utsa.edu/).

³ Reportable claims include fatalities, occupational diseases, and injuries with at least one day of lost-time due to the work-related injury.

percent) slightly exceeded the share of reportable claims (13 percent). The share of DD exams in Rural counties was lower than reportable claims share by just 1 percent for each of the remaining years. Notably, the number of reportable claims decreased by about 10 percent from 2010 to 2015, and seemed closely aligned with the rate of decrease in the total number of DD exams during most of those years.

Table 5.2: Share of Designated Doctor Exams
Rural and Urban Counties
Exam Years 2010 - 2015

| Exam Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------|------|------|------|------|------|------|
| Rural | 11% | 13% | 13% | 14% | 13% | 13% |
| Urban | 89% | 87% | 87% | 86% | 87% | 87% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note*: The federal government uses two primary definitions for Rural, one by the U.S. Census Bureau and the other by the Office of Management and Budget. Both generally define Rural as less than 50,000 in population. By this definition, 191 Texas counties are rural and 63 are urban. About 15 % of the state's population resided in rural counties during 2010 – 2015.

DESIGNATED DOCTORS IN RURAL AND URBAN COUNTIES

In Rural counties, the share of DC exams increased from 2 percent in 2010 to 51 percent in 2015 (see Figure 5.1), while MD exams decreased from 77 percent in 2010 to 37 percent in 2015. The percentage of DO exams in Rural counties fell from 21 percent to 12 percent during the same period. The most significant changes for the license types also occurred after the implementation of HB 2605 and its required new rules.

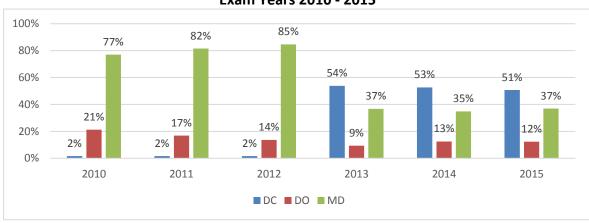


Figure 5.1: Share of Designated Doctor Exams, Rural Counties Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note*: The federal government uses two primary definitions for Rural, one by the U.S. Census Bureau and the other by the Office of Management and Budget. Both generally define Rural as less than 50,000 in population. By this definition, 191 Texas counties are rural and 63 are urban. About 15 % of the state's population reside in rural counties.

In Urban counties, the share of DC exams increased from 2 percent in 2010 to 49 percent in 2015 (see Figure 5.2), while the share of MD exams decreased from 86 percent in 2010 to 45 percent in 2015. The percentage of DO exams fell from 12 percent to 6 percent during the same time.

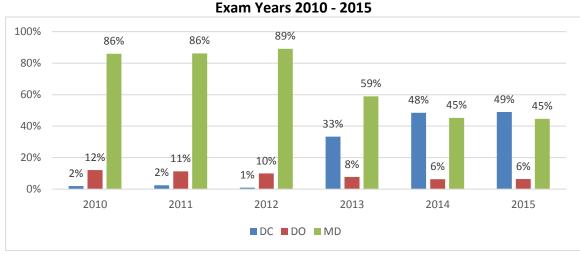


Figure 5.2: Share of Designated Doctor Exams, Urban Counties

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018.

Note*: The federal government uses two primary definitions for Rural, one by the U.S. Census Bureau and the other by the Office of Management and Budget. Both generally define Rural as less than 50,000 in population. By this definition, 191 Texas counties are rural and 63 are urban. About 15 % of the state's population reside in rural counties.

In 2010, MDs tended to have a lower share of exams in Rural counties (77 percent) than in Urban counties (86 percent). Conversely, DOs tended to have a higher share of exams in Rural counties (21 percent) than in Urban counties (12 percent). Not surprisingly, Urban and Rural counties experienced the largest changes in 2013, after the implementation of HB 2605 and required new rules. By 2015, DCs had a higher share of exams in Rural counties than in Urban counties, slightly more than 50 percent compared to slightly less than 50 percent.

The number of DD exams fell during the study years, but the decrease started even before the HB 2605 changes, decreasing 11 percent from 2010 to 2011. The number of DD exams fell a further 11.5 percent from 2011 to 2015, during which the number of reportable claims decreased at a similar rate, 10 percent.

It should be noted that other factors, besides HB 2605 and the new rules, could influence shifts in the distribution of exams by doctor type across Rural and Urban counties. Changes in the distribution of body parts, and the resulting types of doctors who sign up to cover these regions, may also have impacted these changes. This study did not conduct analyses to measure those factors by Rural and Urban status or by the following geographic regions.

CENTRAL TEXAS AND HILL COUNTRY

As a share of DD exams in Central Texas and Hill Country, the percentage of DC exams increased from 2 percent in 2010 to 47 percent in 2015 (see Figure 5.3). Not surprisingly, given the increase in the number of DCs and the decrease in MDs as DDs, the percentage of MD exams decreased from 89 percent in 2012 to 44 percent in 2015. The percentage of exams by DOs also decreased during the study period, from 13 percent to 8 percent.

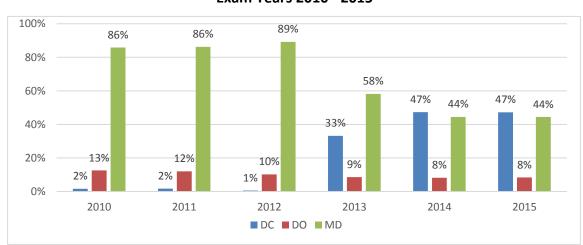


Figure 5.3: Share of Designated Doctor Exams, Central Texas and Hill Country

Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note: Central Texas and Hill Country includes Austin, San Antonio, and Waco.

COASTAL

In the Coastal region, the percentage of DC exams increased from 2 percent in 2010 to 48 percent in 2015 (see Figure 5.4), while MD exams decreased from 85 percent in 2010 to 46 percent in 2015. The percentage of DO exams fell from 13 percent to 7 percent over the same duration. The most significant increases and decreases in DC and MD exams respectively, occurred after 2012.

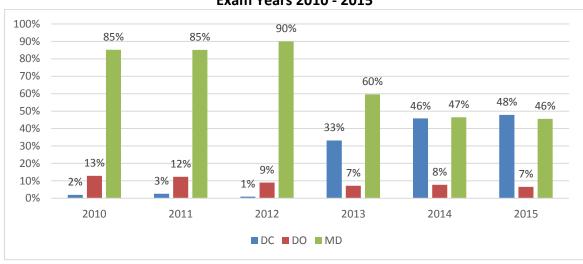


Figure 5.4: Share of Designated Doctor Exams, Coastal Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note: Coastal includes Houston, Corpus Christi, and Galveston.

EAST TEXAS

In East Texas, the percentage of DC exams increased from 2 percent in 2010 to 48 percent in 2015 (see Figure 5.5), while MD exams decreased from 84 percent in 2010 to 43 percent in 2015, with the major changes occurring after 2012. The percentage of DO exams fell from 14 percent to 9 percent over the same duration.

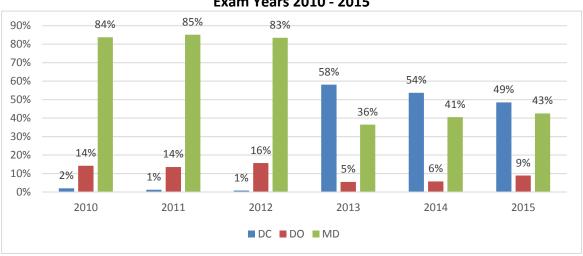


Figure 5.5: Share of Designated Doctor Exams, East Texas Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note*: Includes Texarkana, Tyler, and Huntsville.

NORTH TEXAS

The percentage of DC exams increased in North Texas from 3 percent in 2010 to 49 percent in 2015 (see Figure 5.6), while MD exams decreased from 83 percent to 43 percent over the same timeframe. The percentage of DO exams fell from 14 percent to 8 percent, with the major changes for all three license types occurring in 2013.

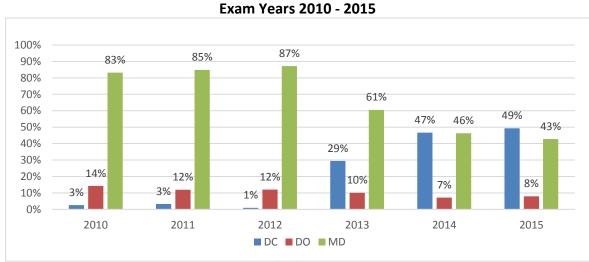


Figure 5.6: Share of Designated Doctor Exams, North Texas
Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note*: Includes Dallas, Fort Worth, Denton, and Sherman.

HIGH PLAINS

The percentage of DC exams in the High Plains region increased from 2 percent in 2010 to 45 percent in 2015 (see Figure 5.7), while MD exams decreased from 84 percent to 46 percent. Interestingly, MDs held a slightly higher percentage of exams in 2015 than DCs, the only region where this occurred that year. The percentage of DO exams fell from 14 percent to 8 percent over the study duration, again with the largest changes for the three license types beginning in 2013.

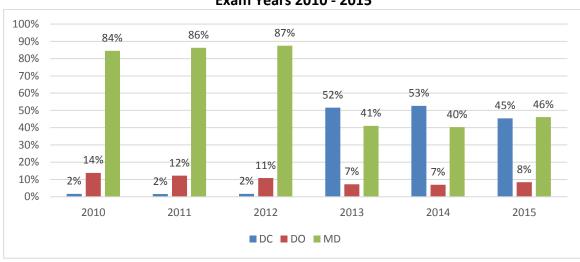


Figure 5.7: Share of Designated Doctor Exams, High Plains Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note*: Includes Amarillo, Wichita Falls, and Lubbock.

VALLEY

The percentage of DC exams increased in the Valley region from 3 percent in 2010 to 52 percent in 2015 (see Figure 5.8), while the share of MD exams decreased from 90 percent to 45 percent. The percentage of DO exams fell from 8 percent to 3 percent over the study duration. Not surprisingly, the major changes occurred after 2012.

100% 90% 89% 87% 80% 55% 55% 60% 52% 45% 43% 39% 40% 20% 8% 6% 7% 8% 6% 3% 3% 3% 2% 0% 2010 2011 2012 2013 2014 2015 ■DC ■DO ■MD

Figure 5.8: Share of Designated Doctor Exams, Valley Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note*: Includes Brownsville, McAllen, and Mission.

WEST TEXAS

In West Texas, the DC share of exams increased from 2 percent in 2010 to 52 percent in 2015 (see Figure 5.9), while the percentage of MD exams decreased from 87 percent in 2010 to 44 percent in 2015. The percentage of DO exams fell from 11 percent to 6 percent during the same period.

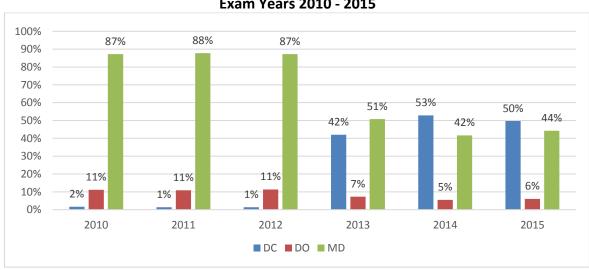


Figure 5.9: Share of Designated Doctor Exams, West Texas Exam Years 2010 - 2015

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2018. Note*: Includes El Paso, San Angelo, and Odessa.

All seven Texas regions experienced similar trends with DD exams between 2010 and 2015. The share of MD and DO exams fell steeply, while the share of DC exams increased dramatically. In 2015, DCs held the largest share of DD exams, except in the High Plains where MDs had a slightly higher percentage than DCs. While these key DD results reflected significant shifts after the implementation of HB 2605 and its required new and amended rules, other results remained essentially unchanged.

