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"He's going to play": The Influence of Timing in Return-to-Play Decisions

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"He's going to play": The Influence of Timing in Return-to-play

Decisions

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Introduction

Professional sports team doctors are routinely stretched in different directions. The Hippocratic Oath tells them to do no harm, and the values that make up common medical ethics prevail. The final decision is left to the patient; his records and medical needs are confidential, and your only concern is the patient and getting him healthy. What if, instead of a hospital signing your paychecks it's the general manager of a professional sports team, who must answer to an impatient owner, expecting results? And what if the media is constantly prying you for information related to the team's star player, and often the player himself has a monetary incentive to return-to-play as fast as possible? This divergent incentive structure has always fascinated me.

Some of the most pressing ethical issues surrounding team doctors are aspects of confidentiality, informed consent, advertising, performance-enhancing drugs, genetic testing, and perhaps the most talked about, return-to-play decisions (Testoni et al., 2013). The importance of these issues is as important as the job itself. If it is determined that it is impossible for doctors to maintain their medical integrity while working in the professional sports environment, the job itself becomes an ethical compromise. Are you the athlete's doctor or the team's medical manager? A private doctor hired by the player is bound by privacy laws and can use anonymity to make objective medical decisions free from organizational pressure. The player may also feel more comfortable talking about the severity of an injury knowing that the diagnosis will not immediately affect their playing time. For many professional players playing on single-year contracts, the outlook of their health is an especially important factor. Private doctors can also provide valuable second opinions for players seeking additional advice about their injury. For players, team doctors can provide comprehensive and consistent medical care. For players who

move teams often, it can be difficult to find or pay for a private doctor, and team doctors provide convenient and low-cost alternatives. It is also advantageous to use the team's facilities for rehabilitation and physical therapy. From a management perspective team doctors are invaluable. It is commonly reported that in 2015 over \$350 million was lost in player salaries due to injuries alone. Having quality medical care is important for teams to manage their players and avoid lost income. Having star players injured is bad for teams trying to fill their stadium seats. Another advantage in using team doctors is that healthcare facilities often agree to reduce the costs of medical care in exchange for exclusive sponsorships with their local sports team. For example, New York University-Hospital for Joint Diseases pays the New York Mets more than one million dollars each year for the rights to advertise as the exclusive healthcare provider for the team. The hospital also receives free tickets to the game and advertising space at the stadium. (Pennington, 2004). Private doctors can be problematic for teams. The privacy they afford players can be off-putting to intermeddling managers, and by choosing a private doctor, a player indicates his distrust in the team, which can often lead to problems with other teammates.

In this paper, I will be analyzing one specific area of sports medical ethics—the decision made by doctors to clear a player to return to the active roster, which is known as the return-toplay (RTP) decision. RTP decisions are unique challenges for physicians. Team doctors not only have a duty to their patient/athlete, but they also have a strong incentive for the team to succeed. Pressure from the medical team, organization, and the athletes is placed on the medical team to push the player back onto the field as quickly as possible. This dynamic is different from the relationship between the doctor and his private practice or hospital. While doctors do have an interest in keeping their private practices and hospitals financially stable, the incentive might lead to over prescribing or too many procedures, whereas for team doctors the opposite effect is achieved. Team doctors have an incentive to perform surgeries that will benefit the player in the short term but not necessarily over the long term. Over half of surveyed physicians cited balancing the pressure to return athletes to play and the athlete's health as the top ethical issue in sports medicine (Testoni et al, 2013).

RTP decisions are at the epicenter of the ethical controversies surrounding team doctors. The decisions they make to medically clear players place enormous pressure on the players to compete whether healthy or not. Normally, this is not a problem from the players perspective. Players want to perform their job and welcome getting cleared by the team doctor as a hurdle to overcome. There are several factors that affect RTP decisions. According to the model presented by Creighton et al., initially the players health status and recovery period is used to determine a timeline. Then, the reinjury risk is evaluated using knowledge and data specific to that sport. Finally, there are decision modifiers where circumstances such as timing or the personal drive from the athlete are considered (2010).

While there are several factors that affect RTP decisions, the focus of this paper will be on timing or, more specifically, the concept that doctors are under pressure to clear players earlier than they normally would because of the standing or value of specific games within a season. The effects of decision modifiers have not been studied in detail in the current literature. One of the goals of this paper is to discuss the weight of timing as a decision modifier in RTPdecisions.

Recently, the case of Kevin Durant has brought new attention to the aspect of timing in RTP decisions of team doctors. Durant is one of the most prodigious basketball players of the last decade. He was drafted into the National Basketball Association (NBA) in 2007, stands six feet ten inches tall and weighs 240 lbs. He is a ten-time all-star, most valuable player, and since

joining his new team, the Golden State Warriors (Warriors), has won two NBA championships. In May of 2019 he was expected to win his third. During the fifth game of the Western conference semifinals against the Houston Rockets, Durant made a jump shot and landed awkwardly on his right foot. He jogged up to the middle of the field before clutching his calf and hobbling off the basketball court. An MRI scan later confirmed the diagnosis, a calf sprain (McCauley, 2019).

Despite losing their star player, the Warriors defeated the Houston Rockets and subsequently the Portland Trail Blazers to reach the NBA finals against the Toronto Raptors. After the first four games of the seven-game series, the Warriors were down 3-1. Since the NBA merger in 1976 only one team had ever successfully come back from a 3-1 deficit in the NBA finals. Before the pivotal fifth game, Steve Kerr, head coach of the Warriors, said that Durant was performing well in practice and stated simply, "He's going to play" (NBA Twitter and Media Reports, 2019). On June 10, Durant triumphantly took the floor. In the second quarter he performed a spin move and landed abruptly on his right leg tearing his Achilles tendon. The Warriors lost the series in six games.

In the wake of the injury, fingers pointed to the coaching staff, management and team doctors. To what degree were they responsible for Durant's injury? When asked about the decision, the president of basketball operations, Bob Myers, said, "It was thorough and it was experts with multiple MRIs and multiple doctors. He was cleared to play tonight. That was a collaborative decision." (Winfield, 2019). While the Warriors organization stated that their decision was based on Durant's performance in practice and the medical clearance from the team doctors, there is little doubt that timing had an influence in their decision. If the Warriors had

been ahead in the series 3-1 instead of a 3-1 deficit, would the Warriors organization have come to the same conclusion?

Durant's recent story highlights several ethical issues with RTP decision making. One issue is the risk of reinjury versus timing. It was commonly thought that the only risk of reinjury to Durant was another calf strain. Almost no one saw ahead of time that the weakness in his calf would lead to an increase in pressure on the ligaments in his leg. While calf strains are relatively common and not serious injuries, torn ligaments another category of injury. Tearing an Achilles tendon, even with modern medicine will sit a player out for an entire season. For Durant, whose contract was set to expire in the coming months, the RTP decision was more important than it seemed. These types of decisions are explored in RTP-decision models but are not effective when proper reinjury risk is not made apparent to the player.

A second ethical issue is the idea of protecting team assets. Would the Warriors have played Durant differently if his contract did not expire after that season? This question presents a new type of player-specific timing. The Warriors might have been incentivized to play Durant as much as possible knowing that he might leave the organization after the NBA finals. While this is plausible, the Warriors were the primary suitors for Durant and in a good position to land Durant for a second contract before the injury happened. The controversy and lost championship could have negatively impacted Durant's perception of the organization and could have ultimately led to his departing from the Warriors for the Brooklyn Nets in the off-season.

Timing, or in this case the proximity to the NBA finals, however, cannot be ignored as one of the primary reasons for the decision to return Durant to play. If a star player is out during one of the most important games of his career, timing is a powerful motivator to get that player back on the basketball court.

Literature Review

The following literature review provides ethical background information on the shortcomings and challenges faced by team doctors. The review starts with ethics governing all team doctors' decisions and addresses the issues of autonomy, confidentiality, organizational pressure, and RTP decision-making, and with respect to the issue of RTP decision-making, timing.

The American Medical Association (AMA)'s code of medical ethics provides that physicians have two responsibilities to athletes. First, physicians should "base their judgement about an individual's participation solely on medical considerations." Second, physicians should "not allow the desires of spectators, promoters...or even the injured individual to govern a decision" ("Sports Medicine"). The International Federation of Sports Medicine (FIMS) was established in 1928 after the first modern Olympic games and is the most relevant institution for the care of international sports competitors. According to FIMS's code of ethics, with respect to RTP decisions, "the outcome of the competition must never influence such decisions" and "no third party should influence these decisions" ("Code of Ethics").

These ethical standards are important to understand as the foundation for ethical decisionmaking by team doctors. While an individual can claim to uphold the ethical values required by their profession, using them in practice is different from a pragmatic viewpoint. Team doctors are presented with ethical challenges, especially when faced with RTP decisions. The relevant issues to the Kevin Durant case study and timing in general are explored below.

According to Testoni. who put together a comprehensive list of ethical issues in sports medicine, it is first important to understand the role of doctors, and how the profession has evolved in terms of patient autonomy and how the role of team doctor has evolved with it. Early

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in medicine, doctors adopted a paternalistic view toward their patients. The doctor was expected to know and decide the best course of action for their patients, but in the late twentieth century, ideas about medical autonomy shifted toward a patient-focused, decision-making process. Doctors now are expected to present a series of plans to their patients and explain the risks and benefits of each course of treatment. Sports team doctors, while still being subject to second opinions and managerial oversight, are required to adopt a paternalistic view through the oversight and influence of the sports organization (2013).

The sports team doctor's decision is heavily weighed when determining if a player is ready to play. Sports teams want to protect their players and are willing to prevent players from seeing the floor if it could mean lost playing time in the future. The inherent problem of autonomy with sports team doctors is that they are the decision maker that is responsible for the career and future of their patient. Sports team doctors must prepare their patients for the action that caused their injury. Doctors must also consider the personal incentives for athletes to play. In the case of Durant, doctors were aware of the potential of his playing and winning his third NBA championship and what that win would mean for his legacy in the basketball world.

While federal law protects patient confidentiality in most medical settings, team doctors are agents of the professional sports team and are under contract to disclose relevant medical information to the team. In a study performed by Waddington and Roderick, several team doctors were interviewed in the Premier League, and among the team doctors in each soccer club, there was no commonly held code of ethics governing the way in which they handle patient confidentiality (2002). This report highlights that confidentiality and the way injures are reported to the media vary widely from team to team. In a report by Anderson and Gerrard, New Zealand Sports Doctors were surveyed on ethical issues in their field. Along similar lines, doctors reported that players will hide injuries so as not to have the information reach managers and adversely affect their playing time (Anderson and Gerrard, 2005). In the case of Durant, especially because of his highly publicized injury, he had an incentive to lie about how he was recovering and how much pain he endured during the recovery process.

In the same report by Anderson and Gerrard, 100% of team doctors reported feeling responsible for the player, whereas 70% indicated feeling responsible for the manager of the team (2005). No case is more indicative of team pressure than that of Dr. Pappas and the Boston Red Sox. Dr. Pappas had removed a portion of infielder Marty Barrett's anterior cruciate ligament (ACL). Dr. Pappas held a 5% stake in the Red Sox team and was made aware that the Red Sox planned on trading Barrett. Acting in the best interests of the team, he downplayed Barrett's injury at a press conference saying that Barrett only suffered some torn cartilage (Chicago Tribune, 2018). While all team doctors are not as incentivized as part-owner Dr. Pappas, to lie, it serves as a reminder of how team doctors can become too entangled in the success of their team that the success of their patients becomes secondary.

Athletes also fall victim to the organizational pressures. In an exposé piece about the Warriors institution, Andre Iguodala tells of the institutional pressure he felt from his teammates when he suffered a fractured femur that he claims was diagnosed by the organization as a thigh bruise: "I'm fighting with the team, I'm fighting with people, I'm fighting with the media. Then my teammates ask me every day, 'How you feeling, how you feeling?'" (Botkin, 2019). The type of pressure felt by Andre Iguodala is understandable in the highly competitive yet star-centric NBA, where rosters are limited to twelve people and the specific physical gifts needed to play basketball at the highest levels are only present in a small percentage of the population.

Conversely, National Football League teams have a 53-man roster and often contain multiple spots of the same position. Most NBA teams only have two per position.

According to the American College of Sports Medicine (ACSM), a three-step plan was issued to help physicians decide on an appropriate RTP decision. Step one includes an evaluation of health of the athlete from demographics, to diagnosis to history of injury. Step two includes the risk involved with the specific athlete ranging from the type of sport, the position played, and the competitive level of the athlete. Step three refers to the actual decision to clear a player and include factors called decisional modifiers. The types of factors include external pressure from the team or community, pressure from the athlete himself, and the timing of the return. The ACSM asserts that there is less benefit for the athlete to return-to-play in the offseason as opposed to the playoffs (Creighton et al., 2010). While the ACSM does list timing as a factor that can contribute to RTP decisions, it is unclear how much that decision should be weighted. In order to put a statistical backing to the current model of RTP decision-making, a statistical review of time-off due to injuries was created to test the hypothesis that relative timing to the playoffs affects how NBA team doctors assess time away from the court.

Hypothesis

While recent literature provides little data as how timing is weighted as a factor affecting RTP decisions, the following hypothesis was derived from the recent literature, ethical trends in sports medicine, and high-profile case studies. Timing, or in the NBA's case, proximity to the playoff games at the end of the season is an important incentive for each team. Team doctors, depending on the standing of their team, are incentivized to return players early if it could mean the difference between making the playoffs and ending the season early. This effect could manifest in a reduced injury period for similar injuries when inflicted at the beginning of the

season rather than the end of the season when games could matter more for playoff contention. In order to test this hypothesis, the following study was performed to assess the impact of timing on the length that players sat out due to injury. The following background information is provided in order to understand the context of the study in the NBA.

Background Information

The NBA season consists of 82 games played each year between October and April. The NBA is divided into two conferences, East and West. The conference standing of each team is determined by the total number of games won. Each conference has fifteen teams and each team is ranked 1-15 in each conference. The top eight teams in each conference at the end of the season are designated as playoff teams.

While the individual needs for each team could not be uniformly compared, the relative standing of each team can serve as a controlling factor for this study. High-ranking teams (1-5) often either have their playoff spot locked up by the last month in the season or have so many wins that even if they lose a considerably higher percentage of games at the end of the season, they still will make the playoffs. There is little pressure for these high-ranking teams to perform at the end of the season, and greater care is given to the players in May. Therefore, when a player is injured, the player is rested for a long as needed to be ready for the playoffs. Conversely, teams in the middle rankings (6-10) are fighting for playoff spots at the end of the season when one or two wins could be the difference between making it to the playoffs. There is an added incentive for these middle-ranking teams to perform at the end of the season. Low-ranking teams (1-5) often participate in "tanking" when teams intentionally lose games to lower their standings to obtain better picks in the NBA draft. Tanking is a pervasive problem in the NBA but is often cited as one of the few ways small market teams can reliably build superstar talent on their

rosters (Paxton, 2019). Like the high-ranking teams, these low-ranking these teams have little incentive to have their injured players on the court. If this logic follows, the average rest time given for each team type should rise or fall depending on their timing needs. This type of analysis assumes that all players are equally important to winning on their team. This, of course, is not true, but the value of an NBA player is increased when compared to other sports because of the relatively small size of their team (12 players per team roster). One way to calculate the individual impact of sports injuries to a team is to calculate the salary lost due to injury. A player making four times the salary of another player should have an impact four times greater for their team to win, while this analysis is not perfect, it does provide a way to calculate at least the perceived value lost due to injury.

Calf sprains were chosen as a control injury because of their common occurrence in the NBA, the relatively agreed-upon recovery time. According to Harvard Health, a muscle strain is defined as a stretching or partial tearing of the muscle fibers. Strains vary in severity, but two general types of strains are of interest. Grade I strains are the focus of the data. They are mild strains where relatively few fibers are torn and require only seven to ten days to recover. The muscle retains its strength but is painful. Grade II strains are move severe and require four to five weeks to recover (Harvard Health, 2020). Calf sprains were also chosen because of the ambiguity of player readiness. The only concern about playing on a sprained calf early is the risk of reinjury as the muscle retains full strength.

Methods

Data was collected for each complete NBA season for the years 2014 through 2019 from prosportstransactions.com. A search was performed to find each player placed on the inactive list (IL) who suffered a mild calf sprain (recovery time <20 days). The NBA season was split into three groups by standing in their respective conference. Teams that placed 1-5 were listed as

High Position Teams. Teams that placed 6-10 were listed as Middle Position Teams, and teams that placed 10-15 were listed as Low Position Teams. The average time for each player to be released from the IL was calculated by month. The salary lost due to a injury was calculated by dividing the yearly salary of the player by the days per year, then multiplying that number by the days on the IL. If the hypothesis is correct, the average time for calf sprains to recover should decrease as the end of the season approaches.

The data contains three sets of data. While statistical analysis is not ethical in nature, it does provide valuable information as to whether the ethical guidelines are justified or whether the analysis shows that certain factors supersede others when making RTP decisions. If timing is a major factor in RTP decision-making, it can provide valuable information for players on what kind of autonomy they must give up when joining a certain type of team. If it is found that a middle position team rests their players less during the end of the season, free-agent players could use this knowledge to decide if playing for the team is right for them or at least could use this information as a factor when considering their future career.

Data and Results

The data is shown as follows: Figure 1 represents the total calf strain injuries in the NBA from 2014 to 2019. Figure 2 shows the Low Position Teams (10-15), Figure 3 shows the Middle Position Teams (6-10) and Figure 4 shows the High Position Teams (1-5). Figure 5 shows the salary lost due to injury days for all teams. Figure 6 shows the salary lost due to injury days for Low Position Teams. Figure 7 shows the salary lost due to injury days for Middle Position Teams. Figure 8 shows the salary lost due to injury days for High Position teams, and Table 1 shows the results of liner regression in R^2 values for each graph. Table 2 shows the average days and salary lost due to calf strain injuries.

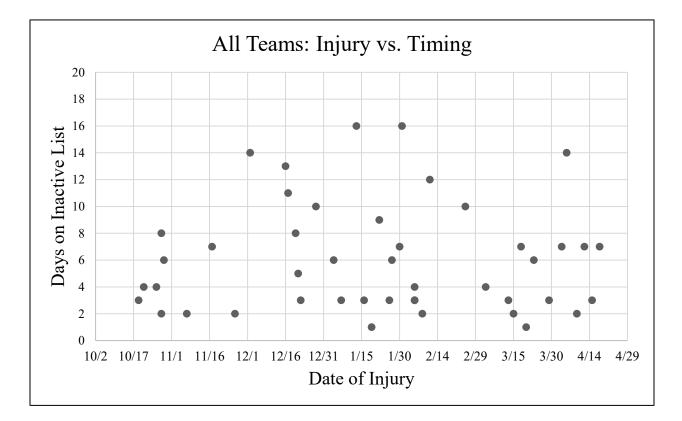


Figure 1: Total reported calf strain injuries 2014-2019.

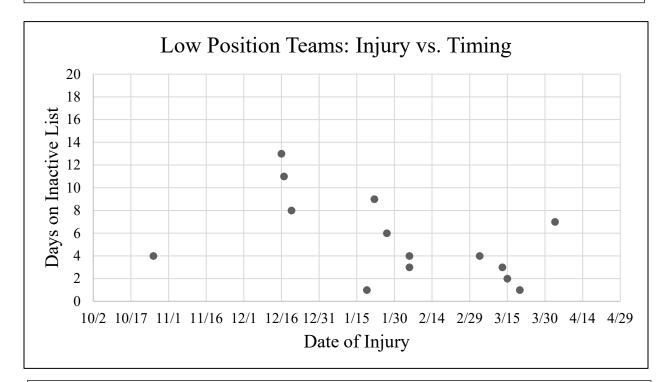
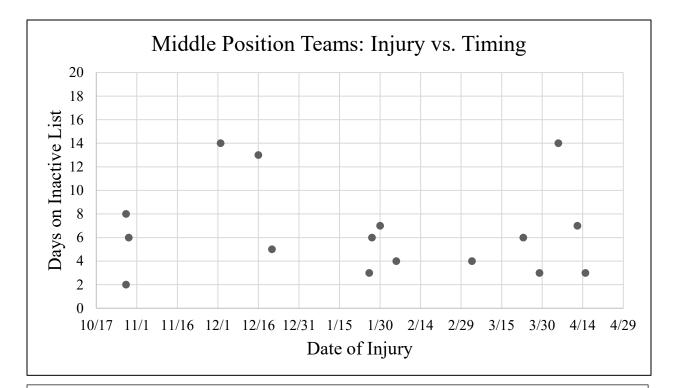
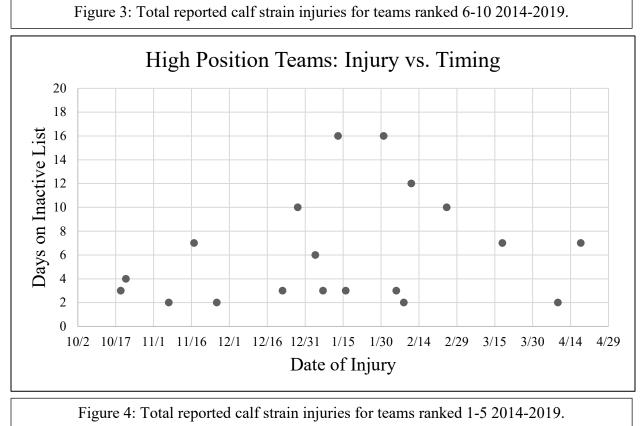


Figure 2: Total reported calf strain injuries for teams ranked 10-15 2014-2019.





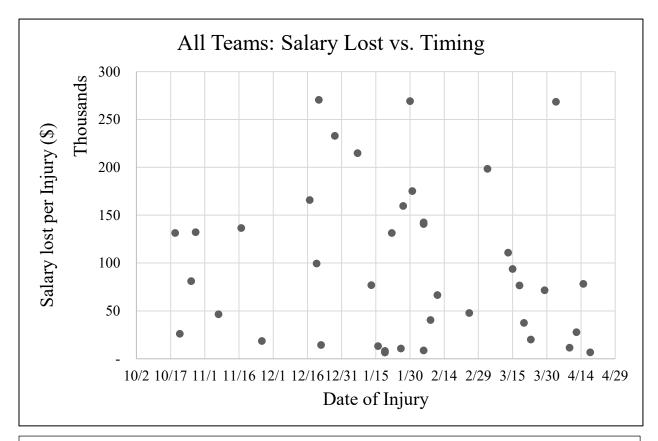


Figure 5: Salary lost due to calf strain injuries <\$300,000 2014-2019

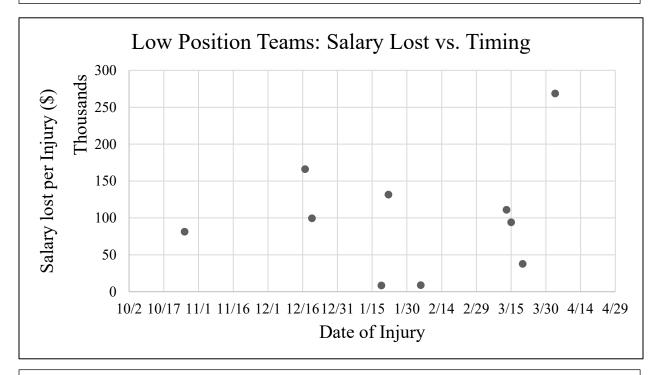


Figure 6: Salary lost due to calf strain injuries for teams ranked 10-15 <\$300,000 2014-2019

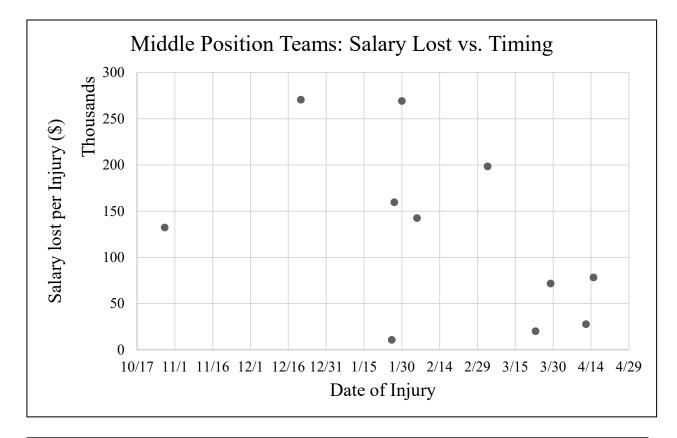


Figure 7: Salary lost due to calf strain injuries for teams ranked 6-10 <\$300,000 2014-2019

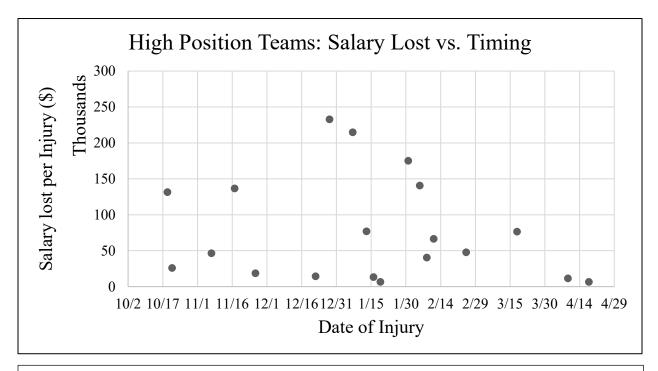


Figure 8: Salary lost due to calf strain injuries for teams ranked 1-5 <\$300,000 2014-2019

Table 1: R ² values for each team type			
Теат Туре	Days on IL R^2	Salary Lost Due to Injury R ²	
All Teams	0.0014	.0129	
Low Position	0.2030	.038	
Middle Position	0.0121	.2264	
High Position	0.0821	.0366	

Table 2: Average days and salary lost due to calf strain injuries 2014-2019			
	Average days lost due to injury	Average salary lost due to injury	
All Teams	6.0	\$96,832	
High Position Teams	6.1	\$78,170	
Middle Position Teams	6.5	\$125,602	
Low Position Teams	4.9	\$115,899	

The results from the data collected were not statistically significant. The R^2 values for each of the graphs did not reach the mark of 0.7 for a strong correlation. The Low Position Team graph had an R^2 value of .203 showing at best a weak correlation. One possible explanation is the lack of data. While prosportstransactions.com has data for the NBA going back to 1979, the details of the injuries are a modern phenomenon. Further back than 2010, injury reports are non-descript, simply listing a body part instead of a specific sports injury. For example, a data entry from 2009 might simply list "calf" instead of specifying if the player's calf is sprained, torn, or bruised.

One startling revelation from the data is the sheer number of players who suffered from calf strains who spent less than seven days recovering. Twenty-six of the forty-nine players with calf strains returned to play in that short timeframe. While this may be attributed to the high-quality care received by the players and their healthy diets, it is nonetheless impressive when considering that most of those players were playing while experiencing high levels of pain. The average rest time was 6.1 days, while the median was only 5.5 days.

Along the same lines, players are also incentivized not to report their injuries to the team doctors, and there are many cases where no injury is specifically listed for a player to receive multiple days on the IL. Deficiencies in reporting and transparency in each organization could also have a strong impact on the data.

During the early months of October and November, all players with calf strains were released within eight days. This most likely is attributable to the relative health of the players during the beginning of the season as opposed to the long, exhausting middle of the season. It could also support the timing hypothesis because each team is on equal footing during the beginning of the season and has an equal opportunity to make the playoffs. For the data relating the salary lost due to injury, the data was more closely correlated but not significant. The R^2 value for the middle position teams was .223, the highest of the group. The other team types did not show a strong correlation to timing. The averages for each group showed that while low position teams had the lowest average injury time, the perceived value of that time lost was much greater than either the high or middle position teams. The low position teams had 4.9 days lost per injury but averaged \$115,899 per injury, while the high position teams had an average of 6 days per injury but only cost the teams an average of \$78,170.

Conclusions

The data presented cannot conclusively determine if timing is a major factor of RTP decision-making. The statistical analysis did not show any linear trends of proximity to the playoffs affecting injury time. As discussed in the data and results section, this could be due to several factors. The lack of data points is staggering. Even in the modern NBA, players are still placed on the IL list for unlisted reasons, and my suspicion is that there are many more calfsprain injuries than officially reported. While NBA teams have the right to move players to and from their rosters at will, transparency remains a problem. One possible reason for the lack of information is driven by media interest. Most sports reporters refrain from talking about the mundane, management decisions of a team unless it directly involves a star player. The NBA is a star-driven league, and there appears to be less interest in the bench player's health and wellbeing. This conclusion is supported up by the data collected. The average salary for an NBA player inflicted with a calf strain in the past five NBA seasons where it was specifically listed as the reason for inactivity was \$9,355,000 per year. The average salary for an NBA player in that same time period was \$6,400,000. The data collected shows that the teams feel more obligated to explain why their higher-paid players are because of an injury. This makes sense from an

organizational and media perspective. Fans pay to watch their favorite players compete, and when that player is out because of an injury there is a greater incentive to justify why that player is unable to play. Another shortcoming of transparency could manifest itself as a lack of injuries when play matters most. From the literature presented earlier in the paper, athletes themselves have a large incentive to keep playing during the pivotal moments in a season. For many, this may include shrugging off nagging injuries and not reporting them to the team doctor. Especially for injuries as minor as calf sprains where the physical strength of the muscle is not lost, the only real symptom is pain. Professional athletes are expected to have a high tolerance for pain and to put their own needs aside for the benefit of the team. This self-inflicted pressure could be one of the reasons for the lack of data on this subject matter.

At least from the preliminary data analysis, the RTP decision is a multifactored decision based on the competing needs of each party involved. The preliminary analysis of playoff proximity is not enough to truly grasp the needs of each team. The scope of this study fails to take specific instances of important matchups versus other playoff teams, long stretches of road games, and back-to-back game scenarios. Each of these scenarios are other factors related to timing that could affect the RTP decision process.

While the study controlled for physiological differences between players by using a standardized injury, one factor that was not accounted for is repeated aggravation of the same injury. Reinjury is one of the main risk factors associated with calf sprains. Several players listed in the data had multiple calf strain injuries throughout the same year. Multiple calf strain injuries suggest that the player might have a playstyle or anatomy particularly susceptible to calf strains. This scenario could also inflate the total rest time data for each calf sprain because each time the calf strain is reinjured, more time is needed for the injury to heal properly.

One important factor that could affect the data is changes in policies made by the NBA between the years 2014-2019. In 2014, the lowest ranking team in the league had a 25% chance of receiving the number one overall pick in the NBA draft. This provided a great incentive to tank or lose games at the end of the season. By 2019, however, the draft lottery system had gone through several iterations so that the worst team in the NBA had only a 14% chance of receiving the number one pick in the NBA draft. Yet another important change in recent years is due entirely to sports betting. Before 2018, NBA teams had to turn in their active roster or the list of players eligible to play in the game only ten minutes before the game. Because of this small window of time, betting odds were swinging wildly in anticipation of who would be playing in the game. To solve this problem, the NBA commissioner made a new rule declaring that teams must submit an active roster 30 minutes prior to the game but allowing teams to change the roster if a player is injured during pre-game warmups. The changing dynamic of the game and even the active roster could have affected what is advantageous for teams and could have affected the doctors RTP decisions as well.

One attempt to calculate player worth was by using their salary as a determining factor. This calculation is not exact as only mature players in the league receive high dollar contracts that are more reflective of their worth. Younger players receive standardized rookie contracts that that set their salary based on their draft order. While I understand the hypocrisy of writing an ethical analysis determining the worth of players by their salary, I believe it is justified in this case. Organizations and the players' agents negotiate salaries based on the market of that player's skillsets or the perceived value to their team. NBA contracts are fully guaranteed and must be paid whether the player performs at the level of their salary or not. All of these factors weigh into an NBA contract and provide a somewhat accurate picture of how many wins a player

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is worth. While salary lost did not have a strong correlation with timing, it did show a correlation to the standing of the team. In general, it appears that teams who have less salary lost to injury are more likely to be top position teams. This is expressed briefly in the data analysis section when referring to Table 2. Logically, that the more salary a team realizes throughout the year, or the less salary it loses to injury, the more minutes the team has to allocate to its best player, and, therefore, the more games it will win. This correlation does not hold true for middle position teams, however. Middle position teams had the highest amount of salary lost due to injury. Arguably, the middle position teams could have been top position teams if it were not for the large amount of injuries sustained. The health of the team is important especially in a sports format with only twelve players on each team.

While the main ethical shortcomings discovered in the data analysis are related to transparency, not timing, the impact of timing cannot be ignored as one of the foremost factors in RTP decisions. While the data was not statistically significant, some parts of the data showed weak trends for reduced rest time for players as the season progressed. While the definition of timing for each team is different, there seems to be at least some trends to support that timing during the season can influence how long players rest due to an injury. Case studies provide a small amount of anecdotal proof, but to find the difference in statistical data may be too complicated and individualistic to discern.

The case of Kevin Durant shows us that RTP decisions have a real impact on a player's future, career, and legacy. While no policies were changed and no blame was assigned for the injury, it serves as a reminder of the complicated and intricate decisions that team doctors are expected to make daily. While timing may not be the most important factor in RTP decision-making, case studies and testimonials show that it can be an exacerbating force when combined

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with organizational pressure, team pressure, and self-inflicted pressure. For professional sports players, playing basketball is more than a hobby, it is a livelihood. It is part of who they are, and no doctor wants to stand in the way of a player and their greatest moment. Even so, doctors are held to an ethical standard that dictates they must act in the best interest of the player. Professional sports organizations are to the same degree charged with not treating at their players as a means to an end, but to take ethical responsibility for their wellbeing and try to do the best they can for the players while balancing the pressures of winning games.

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