



**Governor's Office of Planning & Budget and  
Office of the Legislative Fiscal Analyst**

# **Division of Adjudication Efficiency Evaluation**

*A Report for the Utah Labor Commission*

**January 2024**

# Table of Contents

3

Executive Summary

4

Recommendations

11

Methodology

12

Endnotes

13

Agency Response

16

Authors

# Executive Summary

The mission of the Division of Adjudication (division) within the Labor Commission is to “conduct all formal Utah Labor Commission hearings in a fair, efficient, courteous and consistent manner.”<sup>1</sup> The Governor’s Office of Planning and Budget (GOPB) and the Office of the Legislative Fiscal Analyst (LFA) collaborated with the division to find improvement opportunities in the adjudication process so the division can continue to focus on achieving its mission now and in the future. These opportunities include promoting a uniform process among judges and clerks through the standardization of procedures, optimizing the case management software, known as “Spud”, for improved reliability, improving data collection and reporting capabilities, addressing critical bottlenecks, and implementing a continuous improvement program. The goal of these improvements is to increase accuracy, reduce error, enhance accountability and performance management, promote training, and ensure the continuous refinement of the adjudication process over time.

Recommendation 1 identifies ways to standardize the adjudication process with the goal of improving accuracy and consistency. This effort will also help the division with performance management.

Recommendation 2 focuses on improvements to Spud, including capitalizing on some of its unused capability to more effectively support employees in their work.

Recommendation 3 addresses improvements to the division’s data collection and reporting capabilities.

Recommendation 4 proposes the division improve known bottlenecks and adopt a process of continuous improvement in order to ensure efficiency efforts continue into the future.

## Recommendations

---

- 1 Create a standardized adjudication process for all judges to follow.
- 2 Update and improve Spud to maximize the tool’s usefulness in the adjudication process.
- 3 Improve data collection and report generation.
- 4 Improve known process bottlenecks and implement a continuous improvement program.

# Recommendations

## Recommendation 1

Create a standardized adjudication process for all judges to follow.

*The desired outcome is improved accuracy and reduced errors, a stable baseline from which performance can be measured and improved, and improved onboarding and training, resulting in improved customer outcomes and reduced cost.*

Our first recommendation is to standardize individual steps of the adjudication process to create uniformity by both judges and clerks. While the overarching process is largely standardized, there is variability in the way each step is completed. For instance, different judges may provide different questions to the medical panels for similar cases. Likewise, judges use their own version of templates, some of which have outdated or inaccurate information that requires manual editing each time it is used. We recommend standardizing how each step of the process is completed, the allowable time for each division controlled step of the process, and producing written documentation and training materials for the process.

This can be done in conjunction with Recommendation 2, utilizing Spud as a tool to help promote standardization within the system. By aligning Spud and other tools used throughout the process, the division can make the standardized process clear and the easiest path to follow, making the process self-correcting and reducing the amount of time and effort leaders must invest in ensuring staff members follow the process. One example of this is with file names. Rather than creating a standard set of rules for naming files, Spud could be set up to automatically generate file names in the desired format. This would eliminate the need to modify file names, eliminating a source of variation and error.

The benefits of standardizing the process are three-fold. First, a process with reduced variability is more efficient, especially when best practices are standardized. Second, reducing variation creates a stable baseline from which improvement can be measured and tracked. This allows decision makers to differentiate between problems that are systemic, versus those arising from variability inherent in the system. It also allows decision makers to design better solutions and to be confident that improvements are coming from positive changes rather than from normal variation. Lastly, it simplifies the identification of the root cause of problems and subsequent solutions, since that effort can be aimed at the entire organization.

## Recommendation 2

Update and improve Spud to maximize the tool's usefulness in the adjudication process.

*Updates and improvements should include fixing known bugs such as broken templates, utilizing and improving capabilities like indexing case documents to make them searchable, and creating a user manual or other training materials. The desired outcome is to transform Spud into a tool that employees know how to use, that effectively performs and reinforces the desired process from Recommendation 1.*

To support the stabilized process in Recommendation 1, we recommend updating and making improvements to Spud. This will allow the division to use Spud as a tool to support the overall process, as opposed to treating Spud itself as a process.

Through our information gathering and discussion with division employees we were made aware of bugs

or incomplete functionality within Spud. These issues were often overlooked or bypassed by staff-created work-arounds. This has resulted in unnecessary “unique work” or “manual work” with every case.

In the spirit of reducing unique work, we recommend the division take advantage of current Spud capability of indexing files and create a historic database of past orders and other case documents.<sup>2</sup> Currently, judges reach out to each other through chat or email for sample language, background research, and documentation. This often leads to a delay in making progress on creating documents or finalizing a case if a judge is not able to answer a chat message or email right away. Or they may feel they have to leave their work to find an example for another judge, delaying their own cases. The creation of a database is a key part of systemizing the process, creating a reliable resource for judges that allows them to search for information useful to them in writing case documents.

We also recommend the division require electronic filing of all cases and documents to help implement automatic file names (see Recommendation 1) and automatic indexing of initial case files to reduce the manual labor required to convert physical files to electronic files.

We also recommend the division update and standardize templates used by judges to communicate with parties or medical panels. Examples include enabling the automatic inclusion of Google Meet links, fixing formatting problems so the generated documents are correct, and standardizing a list of questions that all judges draw from when appointing a medical panel.<sup>3</sup> While we recognize every case is unique, we also recognize that much of the customization that is happening can be reduced by the use of updated and standardized templates.

Spud also has the potential to be more useful to judges and clerks as a workflow management tool by improving the system’s automated reminder capability. This feature is not always used effectively. For example, final orders must be completed within 60 days of the hearing, but Spud does not send a reminder that the order is due until 60 days after the case is entered into the program. By adding one or more reminders prior to the deadline, such as at 30 and 50 days, judges and staff can work proactively to ensure the deadline is met.

We see Spud as capable of helping the division refine their case management practices. However, Spud is complex and has a high learning curve. We recommend the division create a user manual documenting how to use Spud, how Spud is used in the overall process, and who should be using Spud. This user manual will help in future succession planning as well as creating a standard of use that judges and staff can refer to throughout the case management process.

### Recommendation 3

## Improve data collection and report generation.

*The desired outcome is improved data collection and reporting that will inform the continuous improvement process outlined in Recommendation 4 and build on the stabilized system designed in Recommendation 1.*

When this project was initiated, Spud was found to have many problems such as the proliferation of unnecessarily unique codes, templates that needed significant editing after being generated by the system, the inability to adequately integrate with software products (e.g., Google Meet) that have been adopted since the creation of Spud, and more. One result of these problems is that the division does not have complete and consistently accurate information about the performance of the adjudication process.

Specific necessary improvements we found include:

**Skewed Data.** A review of the Spud data shows that even when a case has been closed within Spud, the case continues to log hours, skewing the length of open time and actual time a case is actively open.

**Report Generation.** We also observed problems with Spud generated reports. The “Average Days with Medical Panel” report should only be capturing cases in process but is also including closed cases.<sup>4</sup> These closed cases should be removed and not counted as active medical panel cases. The “Cases Ready for Order” report detailed a case at 16 days

when “Judge Ready for Order over 60D [60 days]” showed the same case open for 79 days. There are multiple reports in Spud that focus on whether orders are meeting their 60 day deadline specified in administrative rule. These reports can generate results that conflict with one another depending on the queries that generate the results.<sup>5</sup>

**Code Issues.** There were inconsistencies found with codes being used that denote the opening of a case but it is unclear which action code is actually considered the code that determines a case has been open. In FY22, 1,460 applications have an initial “A1 - case open” action, but only 810 with “A10 - Completed Application for Hearing Received” (600 case openings but only 800 actual cases). Of 858 cases with an A10 code only 851 are followed through with “A30 - Order for Answer.” Additionally, “OC” is the action code to designate a medical panel order from a judge. However, another code in the system for medical panel order has a third character representing a judge’s last name, which is used by only that judge and was created years ago.<sup>6</sup>

It is important that the software collects and accurately reports the key information that decision makers need to know to manage daily operations. Additionally, this will help to perform root cause analysis and identify solutions as outlined in Recommendation 4 below.

## Recommendation 4

Improve known process bottlenecks and implement a continuous improvement program.

*The desired outcome is to quickly improve efficiency by focusing resources on specific high-impact problems, followed by continuously improving the adjudication process.*

Recommendations 1-3 are intended to fix known issues with the adjudication process, lay the groundwork and set the baseline for further improvements. By fixing known bottlenecks and implementing a continuous improvement program, the

division can build on the success of this project and use the momentum to fix new issues as they arise and continue to identify additional improvements that can be implemented. The division is well situated to implement such a process in collaboration with the Quality and Process Improvement component of the Labor Commission’s Administrative Services Division.

Agency time and resources are limited, as is staff capacity for implementing change in addition to their regular duties. We recommend the division focus on identifying and improving process bottlenecks, prioritizing improvement projects with the highest return and completing them at a cadence within staff and resource capacity. The most significant bottleneck we encountered in the course of this evaluation was with Spud. The issues we identified are outlined in Recommendation 2. After fixing the major problems with Spud and laying the groundwork for future updates, the next step is to identify and fix additional known process bottlenecks in priority order based on the expected return on investment of each improvement.

As bottlenecks are identified some will be within the control of the division and some will not. Even when the division doesn’t have complete control of a situation, if it is identified as a significant bottleneck, work should be done to positively influence the outcomes of the bottleneck. The first step in analyzing a bottleneck is to determine the root cause of the problem. Steps to determine root cause involve clearly defining the problem and collecting relevant information and data, and then using tools such as the 5 Whys<sup>7</sup>, fishbone diagrams<sup>8</sup>, statistical analysis, or other tools that are appropriate for the situation to explore potential causes. Identifying the root cause should then be followed by steps to find and implement solutions that address the root cause.

## The Division Might Consider Root Cause Analysis Tools

One example of a potential bottleneck the division could assess is its medical panel process, which can be expensive and time consuming. In fiscal year 2022, medical panels cost the division \$678,000 in physician expenses and required an average of 118 days to complete. These durations are also highly variable, ranging from less than 30 days for some medical panels to issue their report to 400 or more days before other medical panels are concluded.



One of the tools that could be used to explore potential root causes is a “5 Whys” analysis (see Figure 1). While the below example illustrates five levels of questions, potential root causes might be identified in more or fewer than five questions. It is also important to note that the example intentionally excludes many possible answers and follow-up questions to keep it concise.

1. Why do some cases take longer than others?

- a. Possible Answer: Some cases may take longer because they are more complex.
- b. Possible Answer: Some medical panel chairs may take longer to complete cases than others.

2. Follow-up questions:

1a: Why do complex cases take longer than others (see Question 1 Possible Answer 1a)?

- Possible answer: Complex cases may require medical specialists that are difficult to contract with.

1b: Why do some medical panel chairs take longer to complete cases?

- Some chairs may have a larger medical panel workload than others.
- Some chairs may not have sufficient time available to complete the demands that medical panel work places on them.

3. Follow-up questions:

2a: Why are medical specialists difficult to contract with?

- Possible answer: Many specialists may not know about the opportunity.
- Possible answer: Some specialties may be rare.

2b: Why do some chairs have insufficient time to complete the demands of medical panel work?

- Possible answer: Some chairs may not prioritize time for medical panel cases over other work available to them.

4. Follow-up questions:

3a: Why do many specialists not know about the opportunities?

- Possible answer: They may not have been reached through the division’s recruitment efforts.

3b: Why are some chairs unwilling to prioritize time for medical panel cases over other available work?

- Possible answer: The pay may be low relative to their alternative opportunities.

5. Follow-up questions:

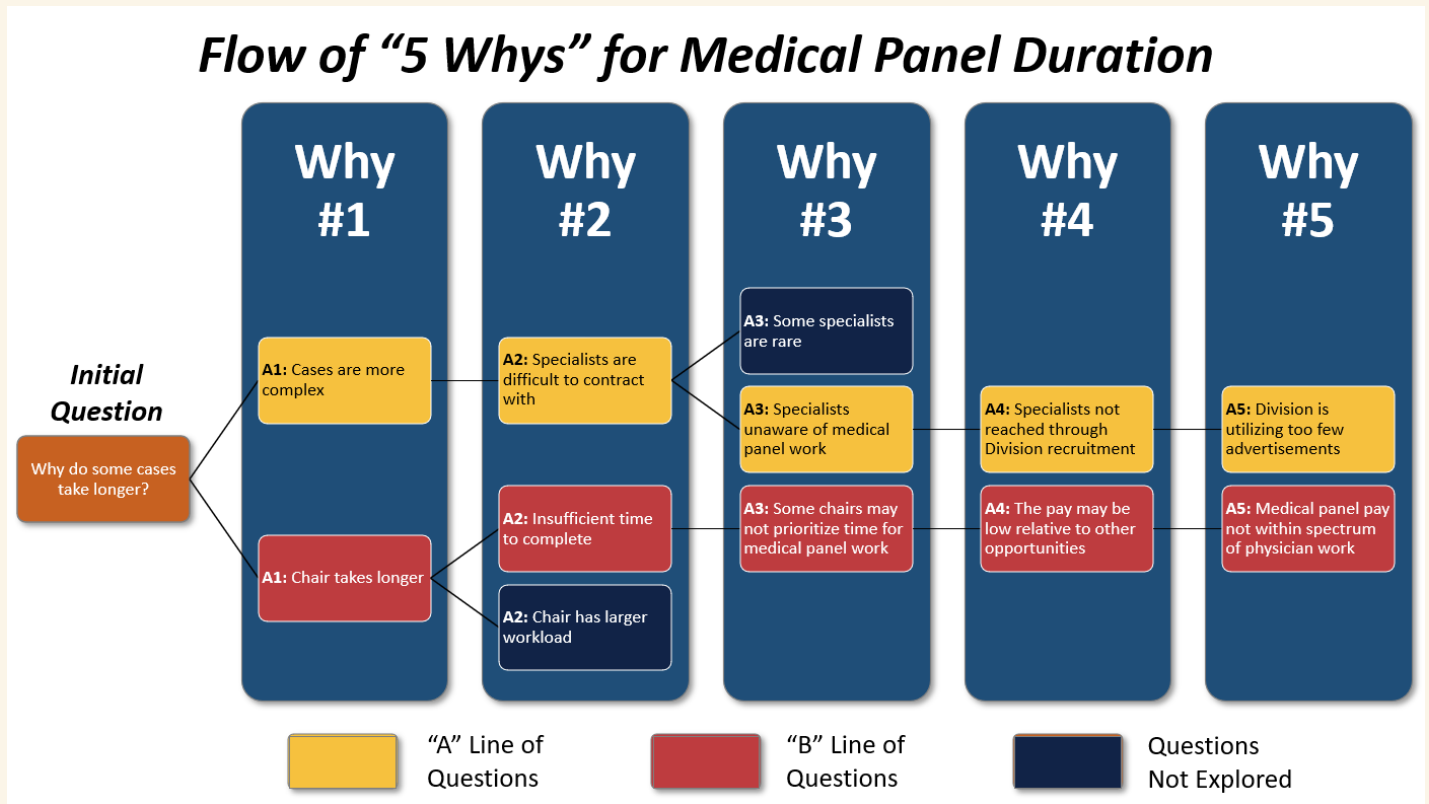
4a: Why have many specialists not been reached through the division’s recruitment efforts?

- Possible answer: The division may be using poor recruitment strategies, including too few advertisements for the opportunity.

4b: Why is the pay low relative to physicians’ other opportunities?

- Possible answer: The flat pay rate offered to medical panel chairs may not reflect the spectrum of pay rates that physicians can earn elsewhere.

Figure 1: Flow of “5 Whys” for Medical Panel Duration

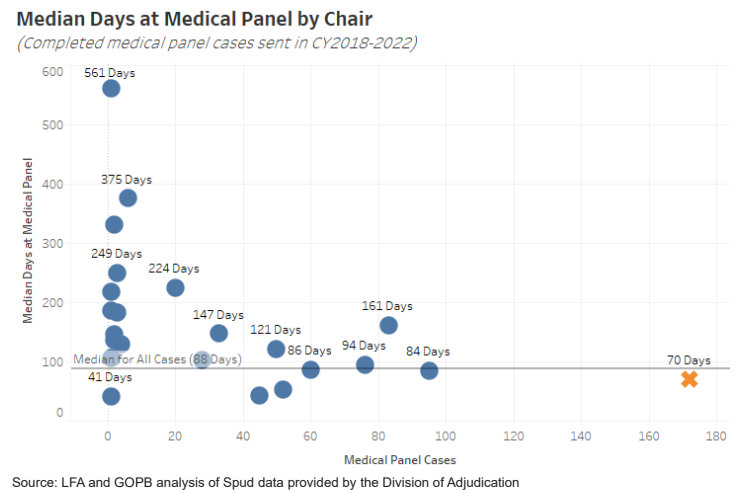


Effective root cause analysis also requires work to confirm each potential answer to ensure the cause and effect chain is accurate. To illustrate how this might be done, we performed the following exploratory analysis with the hypothesis that the physician overseeing the medical panel affects the duration of the medical panel, to try to validate the possible answer to 1b from the above 5 Whys analysis “some medical panel chairs may take longer to complete cases than others.”

For the first step in this analysis, we graphed each provider on a scatter plot. In Figure 2, each circle and “X” represents a different provider who oversees medical panels. The x-axis shows how many cases the physician oversaw from calendar year 2018 through 2022, while the y-axis shows the median days panels were completed. As one physician exceeded the others in volume, they are designated with an orange “X” and will be discussed later.

As Figure 2 illustrates, some physicians take longer than others on average. However, we also note that the variation is greatest among physicians with the smallest sample size of cases, while the average for physicians with more cases tends to be closer to the population mean. The provider with the most cases

Figure 2: Median Days at Medical Panel by Chair



(172) had a median turnaround time of 70 days, compared to the median of 88 days for all physicians during the period. This leads to the question: Why do some medical panel chairs take longer to complete cases (2b, 1b above)?

The next step in our exploratory analysis looks at the distribution of all medical panel durations and compares that with the distribution of medical panel durations for only the provider with the highest



volume of cases. Interestingly, even the physician who chaired the most medical panels and had shorter cases on average in the chart above still had many cases that were significantly longer than their median. Figure 3 shows the distribution of medical panel cases according to how long they took. The top providing physician is shown in orange, while all other providers are shown in blue.

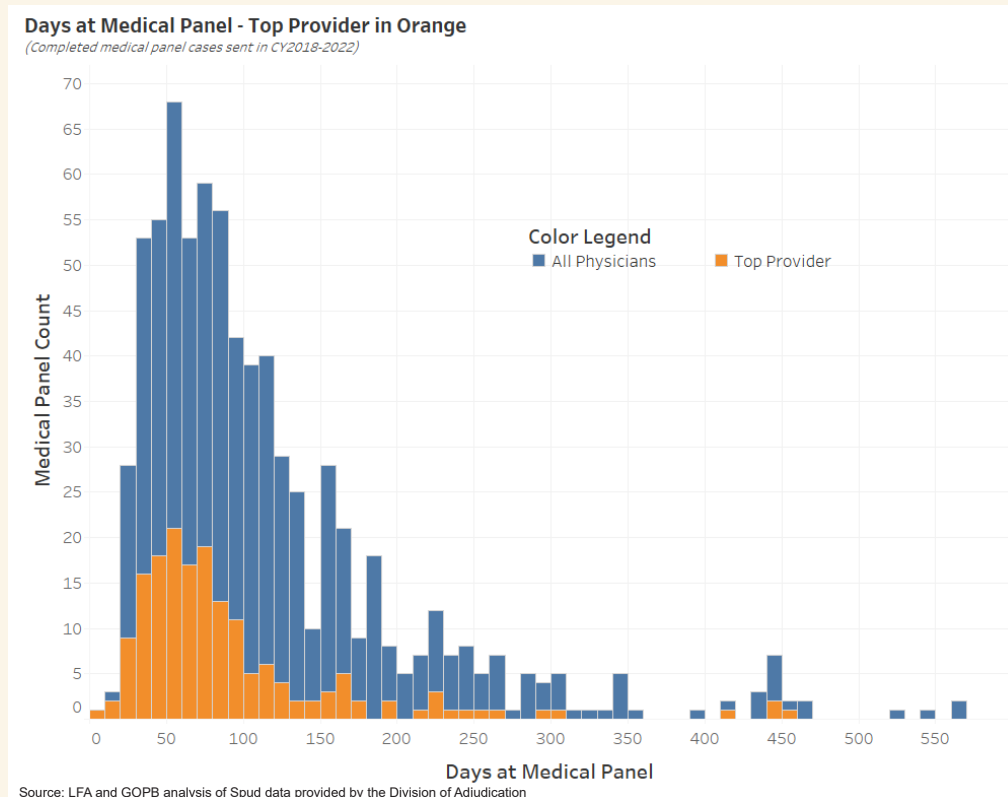
This distribution shows that the division’s top providing physician (orange) had significant variation in medical panel duration; while a majority of cases were under 150 days, with some under 30 days, a small number took 300 to 400 plus days to complete. The significant variation between medical panels that persists even when looking at only a single provider suggests that the variation in the first chart may be due to additional factors beyond differences between physicians.

For the third step in our analysis we performed a linear regression. We found that while there is a statistically significant difference between physicians, our standard error was relatively large (81 days) and our adjusted R-squared relatively small (0.24); therefore we do not have sufficient evidence to conclude that the variation in medical panel durations is only caused by differences between physicians. Further work could consider other hypotheses until the root cause is verified.

Working through to discovery of the root cause prior to deciding and implementing solutions creates a situation where resources and staff capacity are not wasted on solutions that will not provide the desired results. When a cause is identified, carefully determine if it is a direct contributor to the problem, or if it is a symptom of a still deeper issue. Once the root cause, or set of causes, is believed to have been identified, potential solutions can be identified through further analysis, especially through engagement with the employees completing the work. After implementing solutions, the bottleneck should be monitored to ensure that the improvement was successful in fixing the problem, and that the solution endures (see Recommendation 4).

Once known bottlenecks are resolved, it is essential that a continuous improvement process is implemented. Without a strategy in place to continue the momentum of improvement, it is likely that over the long-term the process will gradually revert to a less efficient state. Steps of the process that are not currently impeding workflow will likely become bottlenecks as other, more significant barriers are resolved, and a continuous improvement process can incrementally improve the process as these become apparent. In addition, a continuous improvement process will help prevent the accumulation of small problems over time until they become major issues.

**Figure 3: Days at Medical Panel**



While the Labor Commission should build a continuous improvement program using the tools and methods that work best for their individual circumstances, some suggestions include:

- The use of standard work
- Having decision makers periodically job shadow different employees to identify opportunities for improvement as well as best practices
- Soliciting improvement ideas and identifying problems during regular huddles, staff meetings, in dedicated process improvement meetings, etc.

With a robust process in place to identify problems and opportunities, as well as an effective process for communicating problems and solutions among staff, leadership, and other stakeholders, many improvements can be implemented quickly and on an ongoing basis. In other instances, leadership may use strategies such as a “kaizen blitz.” This is a focused, high-intensity rapid approach that involves bringing together cross-functional teams and stakeholders for a short and focused period of time, typically a few days, to identify root causes, design solutions, and create an implementation plan for improvements.

# Methodology

## Operations

### Recommendation 1

- Key methodology: [Six Sigma](#)

### Recommendation 2

- Key methodologies: [Lean](#), systems theory<sup>9</sup>

### Recommendation 3

- Key methodology: [Theory of Constraints](#)

### Recommendation 4

- Key methodology: [Continuous improvement](#)  
(broad; part of all methodologies)

## Data and Information Gathering

Division costs were pulled from the FINET data warehouse. Personnel costs were identified for the division, while compensation for the medical director and medical panel were pulled from the “Uninsured Employers Fund”.

Operational data was obtained from the division’s Spud application, which is their application for tracking activities, tasks, and events on cases being adjudicated. Direct observation of the system were made on site at the Labor Commission’s downtown offices. Additionally, specific reports were pulled by division and DTS staff.

# Endnotes

1. <https://laborcommission.utah.gov/divisions/adjudication/>
2. This is something the division has considered. DTS support indicates it is possible within current Spud configurations. The division indicates a database of cases between 5-10 years old would be sufficient.
3. In addition to these examples, division leadership will know the full extent of template updates that will be useful to judges and staff in eliminating this level of unique work.
4. If comparing the average days with a medical panel over time, old cases that were closed after a medical panel order was issued but was dismissed or withdrawn before the medical panel report was issued, the number of days for that report continues to be calculated from the day the report was run. Therefore, comparing average medical panel durations by provider can be distorted for previous years. For example, some closed cases in 2019 have “days at medical panel” over 1,200 that continue to increase. Closed cases in 2020 have “days at medical panel” over 900 days that continue increasing and distorting historical baselines to assess medical panel timeliness.
5. Division of Adjudication and DTS staff have started working on identifying and resolving differences.
6. As repetitive and unnecessary codes enter into the system, it becomes more difficult to query the system and generate accurate and actionable reports for leadership.
7. “5 Whys - What is it? | Lean Enterprise Institute.” <https://www.lean.org/lexicon-terms/5-whys/>. Accessed 16 Nov. 2023.
8. “How to Use the Fishbone Tool for Root Cause Analysis - CMS.” <https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/fishbonerevised.pdf>. Accessed 16 Nov. 2023.
9. See Thinking In Systems: A Primer by Donella Meadows, published in 2008.

# Agency Response



State of Utah

SPENCER J. COX  
*Governor*

DEIDRE M. HENDERSON  
*Lieutenant Governor*

## Labor Commission

JACSON R. MAUGHAN  
*Commissioner*

## Adjudication Division

M. ALEX NATT  
*Division Director*

January 29, 2024

Samuel Warrick  
Performance Improvement Coordinator  
Governor's Office of Planning and Budget  
350 N. State Street #150  
Salt Lake City, UT 84114  
Ph: (801) 538-1027

Sam,

Thank you for the opportunity to respond to the recommendations provided by the joint GOPB and LFA Working Group regarding the Labor Commission's Adjudication Division. I speak on behalf of my team when I say we are very grateful for the hard work and dedication your team displayed during this collaborative process. The recommendations provided to us for implementation have given us a great roadmap that we can use to improve the adjudicative process within the Commission. The Adjudication Division is committed to providing "fair, efficient, courteous and consistent" service to the citizens of the State of Utah and the recommendations in your report will allow us to further our aims in this regard.

We agree with all the recommendations in this report. Attached please find a summary of steps we will undertake.

Sincerely,

A handwritten signature in blue ink that reads "Jaceson R. Maughan".

Jaceson R. Maughan  
Commissioner

**Recommendation 1:** Improve Standardization of the Adjudication Process.

**Division Response:** The Division concurs.

The Division will take the following actions to facilitate the hearing process:

Update and Harmonize Templates for Orders.

Update and Harmonize Medical Panel Questions to reduce variation in responses.

Produce Training Materials for Judges and Medical Panelists.

**Recommendation 2:** Improve “SPUD” case management software.

**Division Response:** The Division concurs.

The Division will take the following actions to improve the usage and utility of SPUD:

Fix bugs and broken templates to reduce time associated with case processing.

Ask DTS to create a search tool which allows Judges to more quickly find relevant documents.

Creation of a SPUD user manual for training of new users.

Move toward electronic only filing of cases.

Evaluate current and/or employ new case reminders to prompt user action.

**Recommendation 3:** Improve data collection and report generation.

**Division Response:** The Division concurs.

The Division will take the following actions to improve data collection and report generation:

Eliminate duplicative and/or obsolete SPUD codes.

Harmonize code usage amongst users.

**Recommendation 4:** Improve process bottlenecks and implement continuous improvement program.

**Division Response:** The Division concurs.



The Division will take the following actions to improve process bottlenecks and implement continuous improvement program:

Evaluate and improve the Medical Panel process by increasing the size and variety of medical panelists available to serve.

Consider Statutory and Rule changes if desirable to reduce bottlenecks.

Employ suggested Root Cause Analysis Tools to guide decision making.

# Authors

This report was written as part of a joint collaboration between the Utah Governor's Office of Planning & Budget and the Office of the Legislative Fiscal Analyst.

## Governor's Office of Planning & Budget



Jeff Mottishaw

Director of Operational Efficiencies

Sam Warrick

Performance Improvement Coordinator

Dr. Jill Curry

Senior Budget and Policy Analyst

## Office of the Legislative Fiscal Analyst



Kimberly Madsen

Performance Initiatives Manager

Heidi Tak

Senior Operations Analyst

Tim Bereece

Operations Analyst