

---

# Project Summary Statement

*Project Name: Dooit*

*Team: Husky Trailblazers*

## Analyzing Gender Disparity in Healthcare Payments for Medical Devices

### 1.0 Project Scope Statement

#### Project Scope Includes:

This project will analyze gender disparities in payments made by major healthcare companies in the medical devices sector, utilizing data from the OpenPaymentsData.CMS.Gov dataset. The objective is to identify and address gender-based inequalities in compensation within this specific industry. The project will be conducted over the course of the academic term, with final deliverables due by November 21, 2024.

#### Key deliverables include:

- Data mining and analysis of payment disparities between male and female healthcare professionals in the medical devices sector.
- Visualizations of the analyzed data, highlighting key trends and insights related to payment differences.
- A comprehensive research report detailing findings, including an assessment of existing policies or programs that aim to mitigate disparities.
- Recommendations for new initiatives or policy suggestions to address and reduce gender disparities in healthcare payments specific to the medical devices sector.

### 2.0 Acceptance criteria

---

---

The success of the Dooit project will be measured against specific acceptance criteria that ensure all deliverables meet the defined project objectives and stakeholder expectations. These criteria will focus on the accuracy and reliability of data analysis, the relevance of research insights, and compliance with industry standards. The deliverables must be objectively measurable to facilitate evaluation by the project team and stakeholders.

**1. Privacy Compliance:**

- Data collection and analysis will strictly adhere to HIPAA guidelines, with a compliance report ensuring no personal health information is disclosed.

**2. Dataset Coverage:**

- Data will include at least 2 years of payment records, with key fields like gender, age, device category, and payment amount. Missing data will not exceed 2%.
- All data sources used must have an accuracy rate of 95% or higher, verified through cross-referencing with credible databases and existing literature.

**3. Analysis Standards and statistical Validation:**

- Data visualizations will clearly depict gender disparities, with statistical tests (p-value < 0.05) used to confirm significance.
- The data analysis must utilize accepted statistical methods and frameworks, such as regression analysis and data visualization tools, compliant with industry standards in healthcare research.

**4. Root Cause Analysis:**

- The report will provide at least 3 actionable recommendations backed by a literature review and expert opinions.

**5. Timely Delivery:**

- Final deliverables must be submitted by the agreed deadline, with interim drafts submitted 2 days prior to review meetings.

**6. Client Satisfaction:**

- Findings must be presented in a clear and engaging format, including visual aids (charts, graphs) that meet readability standards and are understandable to a non-technical audience.
  - Success is measured by at least 90% of stakeholders rating findings and recommendations 4 or higher on a 5-point scale.
-

---

### 3.0 Project boundaries or exclusions

This project on gender disparity in medical device payments by major healthcare companies has the following limits:

- **U.S. Focus:** The project will only examine data from the top 20 healthcare companies in the United States. It won't include studies of other countries or global healthcare systems.
- **Medical Devices Only:** The analysis will be restricted to payments for medical devices. Other areas like pharmaceuticals, hospital services, or general healthcare won't be covered.
- **Recent Time Frame:** The project will examine payment data from 2019 to 2023. Older records or future trend predictions are outside the scope.
- **Gender-Specific:** While focusing on gender differences, the project won't explore other factors like race, age, or education level. These are important but fall outside the current scope.
- **Overall Trends, Not Company Specifics:** The analysis will look at big-picture trends rather than each company's internal payment rules. Individual company policies won't be examined in detail.
- **Recommendations and prototype, not actual Implementation:** The project will suggest ways to reduce gender gaps but won't involve full-fledged implementation. The scope ends with delivering analysis and prototype.

These boundaries help keep the project on track and make the most of available resources. By clearly stating what's not included, the focus remains on the main goal: understanding and addressing gender pay differences in the medical device industry.

### 4.0 Project constraints

In the pursuit of achieving the project goals, several constraints will shape the management and execution of our tasks. Adhering to these constraints is crucial for maintaining alignment with the strategic and operational expectations of Dooit. Below are the key constraints that our project team will navigate:

#### **Execution Timeline:**

- Constraint: The project must be executed strictly within the pre-determined dates. These dates have been set to align with the availability of both the project team and the Dooit stakeholders. Adherence to this timeline ensures that project milestones are met without affecting subsequent phases of the initiative.
- Implication: This constraint necessitates meticulous planning and efficient project management to ensure that all deliverables are met within the specified timeframe.

#### **Budget Limitations:**

- Constraint: The total budget allocated for this project is capped at \$35,000. This budget encompasses all aspects of the project, including data acquisition, analysis, labor, and any incidental expenses that may arise during the project lifecycle.
-

- 
- Implication: With a fixed budget, it is imperative to prioritize resource allocation efficiently and manage expenses rigorously to avoid budget overruns. The project team must also be prepared to negotiate costs and seek cost-effective solutions without compromising the quality of the outcomes.

**CEO Approval:**

- Constraint: All major project plans and critical decisions require the final approval of Dooit's CEO. This includes approvals of the scope of the project, any significant changes to the project plan, and the final report and recommendations.
- Implication: This level of oversight ensures that the project remains aligned with the broader strategic goals of Dooit. It also means that the project team must maintain a clear and continuous line of communication with the CEO and other key stakeholders, preparing detailed justification for project approaches and decisions.

These constraints are designed to ensure that the project not only meets its intended goals but does so in a manner that is aligned with Dooit's operational standards and strategic objectives. Effective management of these constraints will be crucial for the successful completion of the project.

---

## 5.0 Project Budget

---

---

Here's an explanation of each budget item:

1. **Data Collection and Mining (\$8,000):** This cost covers the collection of industry-standard payment records for the medical devices sector and the data mining process to extract relevant details, such as gender, age, payment amounts, etc. It involves gathering, cleaning, and preparing the data to ensure it is suitable for analysis.
2. **Data Analysis (\$10,000):** This allocation is for performing the data analysis to identify gender disparities in payments. It includes conducting statistical tests (e.g., significance tests) to validate findings, as well as analyzing the data to uncover patterns, trends, and disparities related to compensation.
3. **Data Visualization (\$5,000):** This budget is for creating visualizations to effectively communicate the analyzed data. The visualizations will help highlight key trends and disparities, making it easier for stakeholders to understand the results of the analysis.
4. **Report Creation and Recommendations (\$7,000):** This cost covers writing a comprehensive research report that includes findings, policy assessment, literature review, and actionable recommendations to address gender disparities. This report will be the final deliverable provided to the client.
5. **Project Management and Meetings (\$3,000):** This budget item includes the costs associated with managing the project, including planning, organizing, team coordination, and holding meetings with stakeholders to ensure the project stays on track and all objectives are met.
6. **Contingency Funding (10%) (\$2,000):** Contingency funding is included as a precautionary measure to cover any unexpected expenses or risks that may arise during the project. This ensures that the project can still be completed within the budget, even if unforeseen challenges occur.
7. **Total Project Cost (\$35,000):** The sum of all these estimated costs results in a total budget of \$35,000, which aligns with the specified budget constraints for the project. The breakdown ensures all aspects of the project are funded appropriately, with flexibility for unforeseen issues through contingency funding.

---

## 6.0 Project Change Management Plan

---

---

This change management plan outlines the procedures for integrating changes to the project scope and ensures any adjustments, such as the addition of new deliverables or modifications to existing tasks, are properly evaluated and implemented efficiently and effectively.

### 1. Change Request Process

- Initiation: Any stakeholder (e.g., team members, clients, or sponsors) can submit a change request. This should be documented using a Change Request Form that includes:
  - Description of the proposed change
  - Rationale for the change
  - Impact analysis on scope, timeline, and resources
- Submission: The completed Change Request Form should be submitted to the Project Manager.

### 2. Change Review Process

- Review: A committee consisting of the Project Manager, key team members, and Business Sponsors will evaluate the change request.
- Assessment: The committee will consider:
  - Alignment with project objectives
  - Impact on current deliverables and timeline
  - Resource availability (budget, time)
  - Risks associated with the change

### 3. Impact Analysis

- Impact of Project Scope: Determine how the change affects the current deliverables, including any new data mining, analysis, visualizations, or report sections.
- Impact of Timeline: Analyze how the change may affect the project timeline, particularly the final delivery date of November 21, 2024.
- Resource Impact: Assess if additional resources are required and how these can be acquired.

### 4. Decision Making

- Approval: The change will be approved if it aligns with the project goals and the benefits outweigh the impacts. The decision will be documented and communicated to all stakeholders.
- Rejection: If the change is rejected, feedback will be provided to the requestor, along with potential alternatives.

### 5. Implementation of Approved Changes

- Action Plan: Develop a detailed action plan to implement the change, specifying:
  - Tasks to be completed

- 
- Responsible team members
  - Updated timeline

- Integration: Ensure that the change is integrated into the existing project workflow. This may involve updating project documentation, adjusting timelines, and reassigning tasks if necessary.

## **6. Communication Plan**

- Stakeholder Notification: All stakeholders will be informed of the approved changes and their implications via email or a project update meeting.
- Documentation Updates: Project documentation (including the project plan and timeline) will be updated to reflect the changes, ensuring all team members have access to the most current information.

## **7. Monitoring and Evaluation**

- Tracking Changes: A change log will be maintained to track all requests, decisions made, and implementation status.
  - Review and Adjust: Regular project meetings will be scheduled to review the impact of changes on project progress, allowing for ongoing adjustments as necessary.
-

---

## Stakeholder analysis

Stakeholder Position/Role	Type of Stakeholder	Stakeholder Expectation(s)	Stakeholder Interest(s)	Influence on Project Result	Stakeholder management strategies
<b>Project Sponsor (Dooit)</b>	External	High-quality, actionable analysis and recommendations to address gender disparity in medical device payments; Approval of major project plans, critical decisions, and final report	High	High	Maintain regular communication with sponsor, ensure project aligns with their business goals, incorporate feedback in each phase.
<b>Project Manager</b>	Internal	Successful completion of the project within scope, budget, and timeline while meeting sponsor expectations.	High	High	Conduct regular meetings, clear delegation of tasks, manage risks proactively, maintain alignment with project objectives.
<b>Data Analysts</b>	Internal	Accurate data collection, cleaning, and analysis to generate insights for the report.	High	Medium	Ensure data accuracy through reviews, provide clear guidelines on privacy compliance and timelines, encourage regular progress updates.

---



<b>Software Developers</b>	Internal	Efficient development of data visualization tools to represent gender disparities in payments.	Medium	Medium	Support team collaboration, ensure tools meet user requirements, keep timelines tight for technical execution.
<b>Research Analysts</b>	Internal	Comprehensive literature review and analysis of causes for gender disparity, incorporating external expert opinions.	Medium	Medium	Provide clear goals for research outputs, offer support in sourcing external expert opinions, and ensure alignment with project objectives.
<b>Business Analysts</b>	Internal	Integration of findings into a cohesive report, offering actionable recommendations to mitigate gender disparities based on data insights.	High	Medium	Align report findings with industry standards, ensure actionable recommendations are feasible, and facilitate communication between technical and non-technical teams.
<b>Dooit Stakeholders or Client</b>	External	Expect meaningful insights that could lead to policy changes in the medical device sector, addressing gender payment disparities.	High	Medium	Ensure transparency in the methodology and deliverables, provide interim reports to manage expectations, involve clients in review stages.
<b>Regulatory Bodies (HIPAA, CMS)</b>	External	Compliance with privacy regulations and standards in data collection and analysis.	Medium	Low	Ensure adherence to HIPAA and other regulations, conduct compliance reviews during the project lifecycle, involve legal experts if needed.

---

---

<b>End Users (Healthcare Leaders)</b>	External	Data-driven insights and strategies to mitigate gender disparities and promote equitable payment policies in the medical device sector.	Medium	Low	Ensure recommendations are practical and aligned with industry best practices, include end-user feedback to improve outcomes.
---	----------	---	--------	-----	---

---

---

---

## Project Milestones

Sr. No.	Milestone / Phase	Start Date	End Date	Status
1	Team Charter	23 Sept 2024	24 Sept 2024	Completed
2	Individual Team Member Assessment- 1	24 Sept 2024	24 Sept 2024	Completed
3	Research Proposal & Project Plan	26 Sept 2024	02 Oct 2024	Completed
4	Individual Team Member Assessment- 2	03 Oct 2024	08 Oct 2024	Pending
5	Mid-Term Presentation	03 Oct 2024	17 Oct 2024	Pending
6	Individual Team Member Assessment- 3	Not Started	22 Oct 2024	Pending
7	Solution & Prototype	Not Started	23 Oct 2024	Pending
8	Individual Team Member Assessment- 4	Not Started	05 Nov 2024	Pending
9	Individual Team Member Assessment- 5	Not Started	19 Nov 2024	Pending
10	Final Prototype	Not Started	22 Nov 2024	Pending
11	Team Signature	Not Started	27 Nov 2024	Pending
12	TEDx Presentation	Not Started	05 Dec 2024	Pending
13	Peer Review	Not Started	09 Dec 2024	Pending

---

---

---

---

## Resource Needs List

Resource Type	Description	Date / Duration	Approval From?	Approval Secured?	Resource confirmed?
Data Access	OpenPayment sData.CMS.Gov and other required datasets for research and analysis.	Available throughout project duration	Project Manager	Not required	Yes
Statistical Analysis Software	Need statistical software to process and analyze large datasets	Available throughout project duration	IT Department	Approved	Yes, software installed and configured
Software Tools	Data analysis tools (e.g., Python, R, Excel) for mining and visualization of datasets.	Project duration	IT Department	Not Required	Yes
Virtual Collaboration Platform	Workspace for research team discussions and collaborations.	As Needed	Project Manager	Approved	Yes, platform is ready for use
Cloud Storage	Need secure cloud storage to store datasets and project documents	Available throughout project duration	IT Department	Pending	Pending
Researcher(s)	Data analysts	Project	Project Manager	Pending	Yes

	perform data mining, analysis, and visualization.	duration			
--	---	----------	--	--	--

---

---

## Project Risk Analysis

### ➤ Probability & Impact Scale:

The probability scale is very straight-forward – the value for the ranking indicates the percentage likelihood that the risk event will occur. In other words, if the project did nothing to avoid (threat) or promote (opportunity) the risk, what are the odds that the risk would occur? By having values to put to the ratings, the assigning of ratings to risks becomes less subjective and can be performed by various team members with equivalent results.

Similarly to the probability scales, the impact scales are weighted heavily towards the higher-impact items. Thus, the bigger the impact, the higher the risk should rise in the rankings. By utilizing the same ranking categories and values between the two scales, the team members can avoid confusion in terminology when working between the scales. In addition, the teams can equate the definitions between the two scales to get a clear understanding of how the company views risk and what it considers high vs. Low.

Ratings	Value
Very Low	0.05
Low	0.10
Moderate	0.25
High	0.50
Very High	0.75

---

Here's a comprehensive Project Risk Analysis considering various scenarios and including a broader range of risks and mitigation strategies:

Risk Id	Risk Statement	Impact	Prob-ability	P & I Rating	Risk Owner	Response Strategy
1	Because the data from OpenPaymentsData.CMS.Gov may be incomplete or inaccurate (cause), the analysis of gender disparities in payments might yield misleading results (condition), leading to ineffective recommendations (conclusion).	0.50	0.25	0.125	Data Analyst	<b>Mitigate</b> – Conduct a preliminary data quality assessment and seek additional datasets from credible sources to validate and enhance the robustness of the analysis.
2	Because handling sensitive payment data poses a risk (cause), there is potential for violating privacy regulations (condition), which could result in legal consequences and project delays (conclusion).	0.75	0.10	0.0075	Project Manager	<b>Mitigate</b> – Implement strict data handling protocols, anonymize data where possible, and ensure compliance with all relevant data privacy regulations. Provide training on compliance.
3	Because there is a possibility of project goals expanding beyond the defined scope (cause), the team may face challenges in maintaining focus and direction (condition), which could result in missed deadlines (conclusion).	0.50	0.25	0.125	Project Manager	<b>Avoid</b> – Clearly define and document the project scope and objectives at the outset, with regular reviews to ensure adherence to the original goals. Schedule weekly check-ins.
4	Because advanced data analysis tools may present technical challenges (cause), integrating various datasets could be more complex than anticipated (condition), potentially delaying the project timeline (conclusion).	0.50	0.50	0.250	Software Developer	<b>Mitigate</b> – Allocate time for team training on data analysis tools and develop a clear integration plan for datasets. Consider using simpler tools for initial analysis to validate methods.
5	Because limited resources or personnel may hinder project progress (cause), the team may struggle to meet deadlines (condition), leading to rushed analysis and	0.50	0.50	0.250	Project Manager	<b>Mitigate</b> – Develop a detailed project plan with resource allocation, and regularly monitor progress to identify and address

---



	incomplete findings (conclusion).					resource constraints proactively. Consider hiring temporary help if needed.
6	Because the effectiveness of policy recommendations may not be guaranteed (cause), there is a risk that suggested policies may fail to mitigate identified disparities (condition), resulting in little impact on gender equity (conclusion).	0.50	0.25	0.125	Research Analyst	<b>Mitigate</b> – Base policy recommendations on thorough data analysis and validation with stakeholders. Engage with experts to refine proposals and ensure they are evidence-based and actionable.
7	Because team members may have conflicting schedules (cause), coordination for meetings and collaborative work might be challenging (condition), leading to communication breakdowns and delays (conclusion).	0.25	0.50	0.125	Project Manager	<b>Mitigate</b> – Use collaborative tools (like Slack, Trello, or Microsoft Teams) to facilitate communication. Schedule meetings in advance and set clear agendas to maximize efficiency.
8	Because unexpected external factors (e.g., regulatory changes, economic shifts) can arise (cause), the project might need to pivot or adjust its focus (condition), leading to scope creep and potential delays (conclusion).	0.50	0.25	0.125	Project Manager	<b>Accept</b> – Regularly review external factors and maintain flexibility in project plans. Develop a contingency plan to adapt quickly to changes as needed without losing focus.
9	Because team members may lack familiarity with the healthcare industry's nuances (cause), the project could misinterpret critical data points or trends (condition), leading to inaccurate conclusions (conclusion).	0.50	0.25	0.125	Business Analyst	<b>Mitigate</b> – Provide industry-specific training for team members. Include subject matter experts in the project to guide data interpretation and ensure accurate analysis.
10	Because the timeline for data collection and analysis may be underestimated (cause), the project could face time constraints (condition), potentially impacting the quality of the deliverables (conclusion).	0.50	0.50	0.250	Project Manager	<b>Mitigate</b> – Build buffer time into the project schedule for data collection and analysis phases. Conduct regular timeline reviews to stay on track and adjust as necessary.

<b>11</b>	Because there is a possibility of low engagement from stakeholders (cause), feedback may not be received in a timely manner (condition), which could lead to misalignment of project goals (conclusion).	0.50	0.25	0.125	Project Manager	<b>Mitigate</b> – Schedule regular stakeholder engagement sessions and provide updates on project progress. Use surveys or feedback forms to collect insights and adjust as needed.
<b>12</b>	Because the team may not effectively communicate project progress and challenges (cause), there could be misunderstandings about responsibilities and timelines (condition), leading to project inefficiencies (conclusion).	0.50	0.50	0.250	Project Manager	<b>Mitigate</b> – Establish a clear communication plan that outlines roles, responsibilities, and regular update intervals. Utilize project management tools for transparency.

---

---

## Project Budget

- The Project Budget section provides a detailed breakdown of the estimated costs for each deliverable or service related to the project.

Deliverable/Service	Estimated Cost
Data collection and mining	\$8,000
Data Analysis	\$10,000
Data Visualization	\$5,000
Report Creation and Recommendation	\$7,000
Project Management and Meeting	\$3,000
<b>Contingency Funding (10%)</b>	<b>\$2,000</b>
<b>Total Project Cost</b>	<b>\$35,000</b>

- ❖ Here's an explanation of each budget item:

- Data Collection and Mining (\$8,000):** This cost covers the collection of industry-standard payment records for the medical devices sector and the data mining process to extract relevant details, such as gender, age, payment amounts, etc. It involves gathering, cleaning, and preparing the data to ensure it is suitable for analysis.
  - Data Analysis (\$10,000):** This allocation is for performing the data analysis to identify gender disparities in payments. It includes conducting statistical tests (e.g., significance tests) to validate findings, as well as analyzing the data to uncover patterns, trends, and disparities related to compensation.
  - Data Visualization (\$5,000):** This budget is for creating visualizations to effectively communicate the analyzed data. The visualizations will help highlight key trends and disparities, making it easier for stakeholders to understand the results of the analysis.
  - Report Creation and Recommendations (\$7,000):** This cost covers writing a comprehensive research report that includes findings,
-

---

policy assessment, literature review, and actionable recommendations to address gender disparities. This report will be the final deliverable provided to the client.

12. **Project Management and Meetings (\$3,000):** This budget item includes the costs associated with managing the project, including planning, organizing, team coordination, and holding meetings with stakeholders to ensure the project stays on track and all objectives are met.
  13. **Contingency Funding (10%) (\$2,000):** Contingency funding is included as a precautionary measure to cover any unexpected expenses or risks that may arise during the project. This ensures that the project can still be completed within the budget, even if unforeseen challenges occur.
  14. **Total Project Cost (\$35,000):** The sum of all these estimated costs results in a total budget of \$35,000, which aligns with the specified budget constraints for the project. The breakdown ensures all aspects of the project are funded appropriately, with flexibility for unforeseen issues through contingency funding.
-

---

## Communication Plan

Stakeholder	Message	Purpose	Frequency	Method
Project Sponsor (Dooit)	Status Report	Update progress of project	Monthly	E-mail using standard report template
Accounts Payable Liaison	Invoices, purchase orders, delivery report	To verify payment is ready to process	Weekly	Original copies delivered via office mail

### Communication Plan Details:

#### 1. Project Sponsor (Dooit)

**Communication Method:** Email using standard report template

**Details:**

**Content Format:** A formal email will be sent to the project sponsor on a monthly basis. It will include a concise summary of the project's progress in the email body, covering key milestones achieved, current status, and an overview of any challenges or blockers that need attention.

**Attachment:** The email will include a detailed status report attached in PDF format. The report will be created using a standardized template for consistency and easy review.

Sections in the Report:

**Project Summary:** Brief overview of the project scope and goals.

**Progress Update:** Status of major deliverables, recent accomplishments, and any deviations from the planned timeline.

**Challenges and Issues:** Summary of key challenges and risks, including mitigation strategies.

**Next Steps:** Planned tasks and milestones for the upcoming month.

**Virtual Meeting:** If needed, a virtual meeting may be scheduled to discuss the report in greater depth. This will be done through an online platform such as Zoom or Microsoft Teams, providing the sponsor an opportunity for direct feedback and clarifications.

#### 2. Accounts Payable Liaison

**Communication Method:** Original copies delivered via office mail

**Details:**

**Document Submission:** Physical copies of all relevant invoices, purchase orders, and delivery reports will be delivered to the Accounts Payable Liaison weekly. The physical delivery ensures the authenticity of these financial documents, which is important for verification and processing.

**Courier or Hand Delivery:** Depending on availability and urgency, the documents will either be hand-delivered to the liaison or sent via a trusted courier service. A receipt acknowledgment will be collected to maintain record-keeping and accountability.

---

---

**Email Notification:** Along with the physical copies, an email will be sent to the liaison. This email will include scanned copies of all the documents as a reference. The subject line will clearly indicate the purpose of the email (e.g., "Weekly Submission: Invoices & Purchase Orders for Verification"). This ensures that the liaison can begin reviewing documents immediately, without waiting for the physical copies to arrive.

**Follow-up:** In case of discrepancies or if further details are required, a follow-up email or phone call may be initiated by either party to address issues promptly.

---

---

---

---