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# Organizational Impact of Workers' Compensation Injuries: A Case Study of Zuckerberg San Francisco General Hospital

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A Case Study of Zuckerberg San Francisco General Hospital

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For

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Abstract

An average of twenty-five (25) employees become injured each month at the Zuckerberg San Francisco General Hospital (ZSFG). This study examines the safety culture and the reduction of injuries at Zuckerberg San Francisco General Hospital. This study includes: hospital employee injury historical data, survey questionnaires, key informant structured interviews, and peer reviewed articles to determine whether the hypothesis is supported. The literature reviewed for this study evaluates the best methods and practices that other organizations have implemented when addressing organizational safety culture. This study has the potential to impact the culture at ZSFG and possibly providing a standardized Injury and Illness Prevention Program throughout the San Francisco Department of Public Health.

## Chapter 1 – Introduction

Background of the problem: Since 2014, there have been an average of twenty-five employees injured each month at Zuckerberg San Francisco General Hospital (ZSFG). One of the primary problems for this high injury rate at ZSFG is that a root cause analysis review of injuries has never been completed. Because of the culture of the hospital, the executive team, as well as the employees have been primarily focusing on patient safety and did not focus on employee safety. Utilizing the workers' compensation system to solve the problem financially. The hospital's injury rate is 7.9 per 100 full time employees and is above the national average, which is 4.2 per 100 full time employees, costing millions of dollars and creating a horrendous morale problem among employees.

Statement of the Problem: The problem investigated in this research study is the lack of employee and management engagement in the Injury and Illness Prevention Program. There is currently a nonexistent employee safety culture at Zuckerberg San Francisco General Hospital. The employees focus on their tasks and ensure those tasks are completed in a timely and safely manner for the patients. However, they are not focusing on if they are performing those same tasks in a safe manner for themselves. According to Hajmohammad and Vachon (2014), Safety Culture is associated with several performance indicators all linked to sustainable development (i.e., environmental, financial, and safety performance). ZSFG does not have any safety goals for employees, only patient safety goals. Therefore, they do not have any safety performance metrics to review for employees. The hospital has an Injury and Illness Prevention Policy in place to meet the State and Federal Occupational Safety and Health requirements. However, the injury rates are proof that the Injury and Illness Prevention Policy is not sufficient.

Purpose of the Study: The purpose of this study is to examine, identify, analyze and evaluate the best approaches for implementing a successful employee and management engaged Injury and Illness Prevention Program that will support a successful safety culture. The reason this study was chosen, was because as a healthcare professional with more than 15 years of experience, I was baffled to see that employee injuries were so significant. Healthcare professionals are trained to provide safe patient care or other patient services. It appears that there is something missing when it comes to employee safety.

Significance of the Study: This study is significant in terms of not only helping identify the best employee and management engagement approaches for implementing a successful Injury and Illness Prevention Program at ZSFG but could possibly be utilized to help San Francisco Department of Public Health (DPH) to address their staff injury rates. ZSFG falls under the San Francisco Health Network under DPH. San Francisco Health Network is working to standardize and unify all DPH's policies and approaches towards not only patient care but also operations. This study could potentially be utilized as a pilot program at ZSFG and lead to a standardized Injury and Illness Policy for all DPH.

Research Hypotheses: The hypothesis for this paper is that including employees in the injury reduction process will change the safety culture and reduce staff injuries. This hypothesis is based on previous studies showing that lack of safety cultures in organizations leads to higher injury rates.

Assumptions and Limitations: The amount of time – eight weeks – to complete this study is a serious limitation.  The assumption made by this researcher is that improving the employee's perception of the safety culture at ZSFG and including them in the injury reduction process will, in time decrease the injury rates at ZSFG.

Expected Impact of the Research: By completing a root cause analysis, interviewing subject matter experts, employees and reviewing injury statistics this study anticipates providing insight to Zuckerberg San Francisco General Hospital's executive leadership. By providing them with their injury data, this study will allow managers to identify the type of injuries that their employees are experiencing and allow them to begin their root cause analysis process. This research will benefit not only ZSFG but could be utilized throughout the Department of Public Health (DPH) to help improve the overall staff safety culture.

**Chapter 2 - Literature Review**

During the initial research review, there were very few studies on hospital staff safety

cultures that did not focus primarily on patient safety. However, the focus of this research paper

is not on patient safety. The focus of the research articles and studies is on safety culture for

several types of industries, such as construction, manufacturing and maritime and how they are

evaluated, implemented and the impact of a successful safety culture.

Safety Culture

In the case study, "Misunderstanding Safety Culture and Its Relationship to Safety

Management" Guldenmund (2010), safety culture is discussed from three different research

approaches: the academic approach, the analytical approach, and the pragmatic approach. The

first two are descriptive and primarily driven by the empirical cycle of scientific research, the

latter is normative and mainly based on expert opinion. Guldenmund argues that these

approaches emphasize different parts of an organization's lifecycle, with the academic approach

looking at a company's past to understand its present, the analytical approach taking a generic

snapshot of the present status of safety within the company, and the pragmatic approach

assessing its current level of development to prepare for the future, using a universal

developmental hierarchy. Guldenmund's study is important to this research paper, in that it helps

layout the three basic approaches to evaluate an organization's current safety culture. This study

will determine if an academic, analytical and a pragmatic approach will be the best way to

evaluate the current safety culture at ZSFG.

In Blome and Ek's (2012) study "Understanding Safety Culture by Visualization of

Scenarios—Development and Evaluation of an Interactive Prototype" they indicated that a

Swedish maritime safety project (MARSAF) was carried out with the aim to yield new knowledge for increased safety at sea. The study focused on human and organizational factors, safety management and safety culture. This study supports this research paper by providing further information on safety culture and methods for evaluating and implementing safety driven initiatives to build a stronger safety culture.

In the study, "Framework for Measuring Corporate Safety Culture and Its Impact on Construction Safety Performance" Molenaar, Park, and Washington (2009) stated that there are three major categories in a safety culture — people, process, and value. In this study the researchers identified five variables that described corporate safety culture: (1) a company's safety commitment; (2) the safety incentives that are offered to field personal for safe performance; (3) the subcontractor involvement in the company culture; (4) the field safety accountability and dedication; and (5) the disincentives for unsafe behaviors. Molenaar, Park and Washington stated that these variables should serve as the company's performance measurements. This study helps provide other possible methods for evaluating and measuring the safety culture for ZSFG by providing variables that can be measured.

Employee and Management Engagement

In the study, Safety Culture, Moral Disengagement, and Accident Underreporting the research was the first to empirically demonstrate that safety-related Moral Disengagement mechanisms predict employee accident underreporting behaviors (Petitta, Probst and Barbaranelli, 2017). Their study also explored the role of organizational culture as a predictor of Moral Disengagement mechanisms in a variety of organizational settings and industries (Petitta, Probst and Barbaranelli, 2017). This study helps identify how the lack of a safety culture can

lead to moral disengagement and the how important it is to have not only the employees involved in the safety process, but as well as management. The study helps provide the significant impact of a lack of employee/management engagement which will help target upper management interests.

In the study, Safety Culture: A Catalyst for Sustainable Development, the paper focuses on how two aspects of safety culture, management commitment and employee participation could directly enhance the three dimensions of the organization's performance, i.e., safety, environmental, and financial performance (Hajmohammad and Vachon, 2014). This study provides support to the hypothesis that including employees in the injury reduction process improves the safety culture. Hajmohammad and Vachon stated that organizations with positive safety cultures are the ones who have successfully managed to change their managers' and employees' attitudes and behaviors to be safety-oriented. This study indicates that by having employees and management actively involved in safety the organizations were able to enhance their performance.

In the study, Framework for Measuring Corporate Safety Culture and Its Impact on Construction Safety Performance, Molenaar, Park, and Washington indicate that management both creates and controls the environment in which construction accidents occur (Molenaar, Park and Washington, 2009). The study also indicates that employees are the ones who will benefit the most from safe conditions. The significance of this study to this research paper is that Molenaar, Park, and Washington indicates that both management and employees must be engaged in the safety process to support a successful safety culture. Without management and employee engagement in the safety process, no matter what initiative an organization tries to implement, it will not be successful.

Implementation Methods

In the article World-Class Safety Culture, Applying the Five Pillars of Safety by Michael Saujani, he discusses that in order to be a company that is world class or is striving to be world class involves the entire organization in safety (Saujani, 2016). Saujani indicates that an organization must engage their employees in risk assessments and safety audits; safety board program; identify-the-hazard program; safe plant of the year award; safety conversations (Saujani, 2016). This article supports the hypothesis in arguing the importance of employee engagement in the organization's safety program in order to reduce staff injuries. This article provides methods for implementing a successful safety culture and even though it is designed for a manufacturing plant, the methods could be utilized for helping ZSFG implement a successful safety culture.

In the study, Framework for Measuring Corporate Safety Culture and Its Impact on Construction Safety Performance, Molenaar, Park, and Washington indicates that the organization must evaluate their people, process and values before they can implement any changes to their safety culture. For implementation purposes Molenaar, Park and Washington indicated that the process should include a safety plan, assessment and change of the safety program, safety training and education, safety incentives, and disincentives (Molenaar, Park & Washington, 2009, p. 489). The safety plan should be an integral part of any organization's safety culture. Organizations should be aware that a safety program will be always changing to fit the needs of the organization. There should be safety education and training to teach safe behaviors and to provide feedback on the effectiveness of the current safety procedures. Molenaar, Park & Washington also indicate there should be incentives and disincentives to help encourage good behavior and discourage any bad habits that the organization is trying to

eliminate. This study helps outline the framework needed to implement a successful safety program to improve the safety culture, which could be utilized to help ZSFG.

In the study, A Method for Changing the System, Process, and Culture Underlying Safety Performance, Brooks Carder recommends utilizing the Plan Do Study Act method when evaluating current safety cultures. Carder conducted a survey in 12 plant sites and six of the plants indicated a need for improvements in their safety programs. The study then utilized the six sites as pilots to test and compare to the other six sites that had high performing safety programs. The importance of this study to this research paper is that it ZSFG may need to evaluate the departments in their organization that is performing well, do a comparison to the departments that are not doing well and implement a pilot program first before making a company-wide change.

The commonalities with the studies and articles provided in this research paper is that to have a successful safety culture the organization must include their employees and management. This will empower their staff, and as in the study Safety Culture, Moral Disengagement, and Accident Underreporting indicated how badly a safety culture can be when the employees are disengaged. This research as well as the other studies, articles and data that were reviewed will be utilized for continuing to build upon this study and provided in the reference section.

**Chapter 3 - Research Methods**

This chapter provides a brief introduction and overview of the research methods. A cross-sectional and experimental studies design was used for this research project. Historical data, surveys, interviews, and peer reviewed articles were collected and evaluated for this study. Cross-sectional studies provide descriptive designs that provide a wealth of information that is easy to understand and interpret (O'Sullivan, Rassel, Berner, and Taliaferro, 2017). The design is frequently used to produce the data needed for planning, monitoring, and evaluating (O'Sullivan, Rassel, Berner, and Taliaferro, 2017, p.29)

The research design helps to ensure that the data and interview data was unbiased by those conducting the study. This data will provide ZSFG a baseline so that the hospital will have a clear understanding as to where the employees believe the hospital ranks when it comes to safety. The next steps after conducting the survey will be to review the findings.

The hypothesis of this study is: Including employees in the injury reduction process will change the safety culture and reduce injuries at ZSFG. To test this hypothesis, an examination of the independent variable and dependent variables was completed. The independent variable is Including employees in the injury reduction process. The two dependent variables are (1) Safety Culture and (2) Reducing Injuries (Quantitative Data).

Data Collection Plan Overview

Population sampling strategy:

For this study the population sampling strategy consisted of the following: The participants that were surveyed were permanent ZSFG employees. In total 100 employees were sent the survey. They were selected because they are the individuals that this study will impact.

The study also interviewed subject matter experts, such as Zuckerberg San Francisco General Hospital's Safety Officer, Department of Public Health's Occupational Safety and Health Workers' Compensation Nurse Manager, San Francisco Workers' Compensation Director, San Francisco Public Utilities Commission Health and Safety Program Manager, and San Francisco General Services Agency Health and Safety Manager. They all represent subject matter expertise and experience that is relevant to this study. They all have worked in the Safety and Workers' Compensation Industry for more than 20 years and have a wide range of safety experience that can be utilized to create the perfect safety program that promotes a healthy safety culture.

The research paper utilized quantitative methods in order to explore employee attitudes and perceptions towards the safety culture. In addition, qualitative methods were used in order to focus on case studies, peer reviewed articles and subject matter expert interviews, with the intention to bring understanding to the concept of safety culture. To measure the Safety Culture, which is based on the employee's perception of the organization, the study utilizes an Ordinal Scale survey. Ordinal scales identify and categorize values of a variable and put them in rank order according to those values (O'Sullivan, Rassel, Berner, & Taliaferro, 2017). A copy of the survey used to collect data is provided at Appendix A.

Data Processing and Analysis:

The organizational safety survey was created and distributed utilizing SurveyMonkey. Interviews of key informants was conducted in different ways -- in-person, over the phone and via video conference. All interviews were recorded to prevent misinterpretation. Data was collected via survey questionnaire to 100 employees out of 3500 total employees at ZSFG.

Dependent and Independent Variables:

In this study the independent variable is Including employees in the injury reduction process. The two dependent variables are (1) Safety Culture and (2) Reducing Injuries (Quantitative Data). In this research paper the researcher is expecting to find that the safety culture and injury reduction is based upon employee involvement/engagement with the injury reduction process. This study hopes to find that by including the employees in the injury reduction process and safety initiatives, the organization will have a successful safety culture.

Controlling for Internal and External Validity

Internal and external validity is important when conducting research. In order to ensure that internal validity is maintained. The survey was deployed to identified employees via SurveyMonkey. To ensure anonymity and confidentiality, the senior management team was not provided with any employee's identification. This procedure helped to ensure that respondents felt confident that their identity was protected, and that they could provide the most honest answers without the fear of reprimand. There is a potential for technology issues to prevent collection of data. The backup plan was to provide employees with the paper survey with a secured drop box for them to provide the surveys.

Operational Definitions and Terms

Employees: ZSFG staff members employed between 07/01/2014 to 06/30/2017. They are also permanent ZSFG employees. Which means volunteer staff, external contractors working on site, and temporary staff, are not considered employees in the context of this research.

Including employees: Employees will be asked to participate in surveys, make suggestions and join the department safety committees.

Injury reduction process: Department Manager is provided the injury data→Review of injury data→Root Cause Analysis Initiated→Plan Do Study Act→Implement Change→Reassess→End

Will change the safety culture: The safety culture will be measured by having ZSFG employees complete a safety survey. However, due to limited time there will not be a follow up survey during this research study. Studies that will be researched will have to provide at minimum an improvement of staff engagement by 10% to indicate a successful implementation.

Will reduce injuries: Injuries will be compared to injury data provided by the U.S. Bureau of Labor Statistics.  However, due to limited time there will not be a follow up survey during this research study. Studies that will be researched will have to provide at minimum a reduction of staff injuries by 10% to indicate a successful implementation.

<u>Limitations</u>

This study is limited in time (eight weeks) so empirical data on reduction in staff injuries at Zuckerberg San Francisco General Hospital will not be collected. However, ZSFG's current injury data will be shared in this study. To determine whether the hypothesis is supported, there must be a correlation between employee involvement and the reduction of staff injuries in case studies reviewed for this research paper.

A restriction to this study is that ZSFG employees were not required to complete the Safety Survey. This study will have to utilize data from other Safety Culture studies and these

organizations may not face the same organizational problems as a public hospital faces.

Therefore, the data and policy suggestions may not work for ZSFG.

Summary

This research paper utilized several different methods of collecting information, such as surveys, interviews and peer reviewed articles. The organizational safety survey was created and distributed utilizing SurveyMonkey. Interviews of key informants was conducted in different ways -- in-person, over the phone and via video conference. In the following chapter the findings from the survey results will be discussed as well as the information retrieved during the interviews with the subject matter experts.

## Chapter 4 – Results and Findings

This chapter presents an analysis of the survey and interviews conducted for the hypothesis. A lower than expected survey response rate of 50% was achieved as only 50 of 100 participants completed the survey. The results of each survey question are examined individually for an in-depth analysis. The low response rate is believed to be due to employees' belief that they do not have the time. Previous ZSFG employee surveys have yielded much lower responses in the past. However, though the response rate was lower than expected (or hoped for) the combined data from the key informant interviews with the survey results confirmed the overall findings from this study.

Question 1: I have the tools and equipment needed to work safely.

a. Strongly Agree
b. Agree
c. Disagree
d. Strongly Disagree
e. Neither Agree nor Disagree

Table 1

| Answer Choices | Responses | |
| --- | --- | --- |
| Strongly Agree | 24% | 12 |
| Agree | 64% | 32 |
| Disagree | 8% | 4 |
| Strongly Disagree | 4% | 2 |
| Neither Agree nor Disagree | 0% | 0 |
| Total | | 50 |

Question one was designed to help establish if ZSFG was providing their employees with the necessary tools to complete their jobs safely. Out of the 100 employees surveyed, 50 employees responded and 64% of their responses was that they agreed that they had the tools and equipment to work safely. There were employees who strongly agreed with this statement and

resulted in 24% of the rankings. The answers from this survey question indicate that employees

feel that ZSFG is providing them with the necessary tools and equipment to perform their jobs

safely. This also leads this researcher to discover other than tools and equipment to perform jobs

safely as the reason(s) for higher than average rates of accidents at ZSFG.

Question 2: Policies are in place to support workplace safely.

    a.  Strongly Agree
    b.  Agree
    c.  Disagree
    d.  Strongly Disagree
    e.  Neither Agree nor Disagree

Table 2

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 10.87% | 5 |
| Agree | 76.09% | 35 |
| Disagree | 6.52% | 3 |
| Strongly Disagree | 0% | 0 |
| Neither Agree nor Disagree | 6.52% | 3 |
| Total | | 46 |

Question two was designed to determine two findings. One, if ZSFG had policies in place

and the employees knew of them. Two, if the policies supported workplace safety. Out of the 50

employees who completed the survey only 46 answered this question. Out of the 46 employees,

76.1% agreed that there are policies in place to support workplace safety. The finding from this

survey question is that ZSFG has policies in place that support workplace safety and the

employees are aware of them. Again, this researcher is led to determine there are other primary

causes for higher than average rate of accidents at ZSFG.

Question 3: My workplace is safe to work in.

    a.  Strongly Agree
    b.  Agree
    c.  Disagree

d. Strongly Disagree
e. Neither Agree nor Disagree

Table 3

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 6.52% | 3 |
| Agree | 63.04% | 29 |
| Disagree | 8.70% | 4 |
| Strongly Disagree | 4.35% | 2 |
| Neither Agree nor Disagree | 17.39% | 8 |
| Total | | 46 |

Question three was designed to determine if the employees felt safe in their workplace.

Out of the 50 employees who completed this survey only 46 answered this question. Out of the

46 employees 63.04% agreed that their workplace was safe to work in. However, with this

question there were a few employees who felt that their workplace was not safe to work in and

there was 17.39% of the employees who answered neither agree nor disagree. This indicates that

there are areas/departments that need improvement and that not all employees feel safe in their

workplace. Most of the employees who answered this question felt safe in their workplace.

Question 4: I feel comfortable raising safety concerns to my supervisor and manager.

a. Strongly Agree
b. Agree
c. Disagree
d. Strongly Disagree
e. Neither Agree nor Disagree

Table 4

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 45.65% | 21 |
| Agree | 45.65% | 21 |
| Disagree | 2.17% | 1 |
| Strongly Disagree | 2.17% | 1 |
| Neither Agree nor Disagree | 4.35% | 2 |
| Total | | 46 |

Question four was designed to determine if ZSFG employees were comfortable raising safety concerns with their supervisors and managers. Out of the 50 employees that completed the survey, 46 of the employees answered this question. Many of the employees answered that they strongly agreed or agreed with this statement by a combined percentage of 91.3%. This indicates that ZSFG employees feel comfortable raising safety concerns to their supervisors or managers.

Question 5: I feel that speed and production is prioritized over safety.

  a. Strongly Agree
  b. Agree
  c. Disagree
  d. Strongly Disagree
  e. Neither Agree nor Disagree

Table 5

| Answer Choices | Responses | |
| --- | --- | --- |
| Strongly Agree | 6.52% | 3 |
| Agree | 23.91% | 11 |
| Disagree | 41.30% | 19 |
| Strongly Disagree | 13.04% | 6 |
| Neither Agree nor Disagree | 15.22% | 7 |
| Total | | 46 |

Question five was designed to determine if the employees felt that speed and production was prioritized over safety at ZSFG. The results of this question are not as straight forward as the previous questions. The employee's answers are not a majority in one category. Out of the 46 employees that answered this question, 23.9% agreed that speed and production is prioritized over safety and another 6.5% strongly agreed. About one-third, 30.4% of the employees surveyed, answered that speed and production is prioritized. The largest percentage of employees, 54.3%, answered that they disagree or strongly disagree that speed and production it prioritized. This indicates that speed and production is prioritized over employee safety concerns.

This leads the researcher to believe that additional research is needed to determine why employees believe that safety is a second-place value in relation to speed and production.

Question 6: There are no significant compromises or shortcuts taken when safety is at stake.

a. Strongly Agree
b. Agree
c. Disagree
d. Strongly Disagree
e. Neither Agree nor Disagree

Table 6

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 6.52% | 3 |
| Agree | 56.52% | 26 |
| Disagree | 19.57% | 9 |
| Strongly Disagree | 4.35% | 2 |
| Neither Agree nor Disagree | 13.04% | 6 |
| Total | | 46 |

Question six was designed to determine if the employees felt that there were any comprises, or shortcuts taken when safety was at stake. Out of the 50 employees that completed the survey only 46 answered this question. More than 50% of the employees either strongly agreed or agreed that there are no significant compromises or shortcuts taken when safety is at stake. However, about one-fourth of the respondents, 23.92%, who either strongly disagreed or disagreed felt that there are significant compromises or shortcuts taken when it comes to their safety in the workplace. This finding indicates further research and analysis is needed to examine why areas/department employees feel this way.

Question 7 Coworkers, supervisors, and management all work together to create a safe workplace.

a. Strongly Agree
b. Agree
c. Disagree
d. Strongly Disagree

e. Neither Agree nor Disagree

Table 7

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 15.22% | 7 |
| Agree | 63.04% | 29 |
| Disagree | 6.52% | 3 |
| Strongly Disagree | 0% | 0 |
| Neither Agree nor Disagree | 15.22% | 7 |
| Total | | 46 |

Question seven was designed to determine if ZSFG employees felt that their coworkers, supervisors, and management worked together to create a safe workplace. Out of the 50 employees that completed the survey only 46 employees completed this question. Over three-quarters of the respondents, 78.3%, either strongly agreed or agreed that coworkers, supervisors, and management worked together to create a safe workplace. This data also is associated with the responses to Question three and indicates that the employees are working with each other to make their workplace safe.

Question 8: Management discusses safety goals and performances regularly.

a. Strongly Agree
b. Agree
c. Disagree
d. Strongly Disagree
e. Neither Agree nor Disagree

Table 8

| Answer Choices | Responses | |
|---|---|---|
| Strongly Agree | 17.39% | 8 |
| Agree | 41.30% | 19 |
| Disagree | 19.57% | 9 |
| Strongly Disagree | 0% | 0 |
| Neither Agree nor Disagree | 21.74% | 10 |
| Total | | 46 |

Question eight was designed to determine if ZSFG management discussed safety goals and performances regularly with their employees. Out of the 50 employees that completed the survey, only 46 employees answered this question. Out of those 46 employees 41.30% of them agreed that management discussed safety goals and performances. However, 19.57% of the employees disagreed and another 21.74% neither agreed nor disagreed. This indicates that there are areas/departments within ZSFG that management does not discuss safety goals and performances regularly and should have further analysis.

Question 9: Age:

a. Born prior to 1946
b. Born between 1946 - 1964
c. Born between 1965 - 1980
d. Born between 1981 – 2000

Table 9

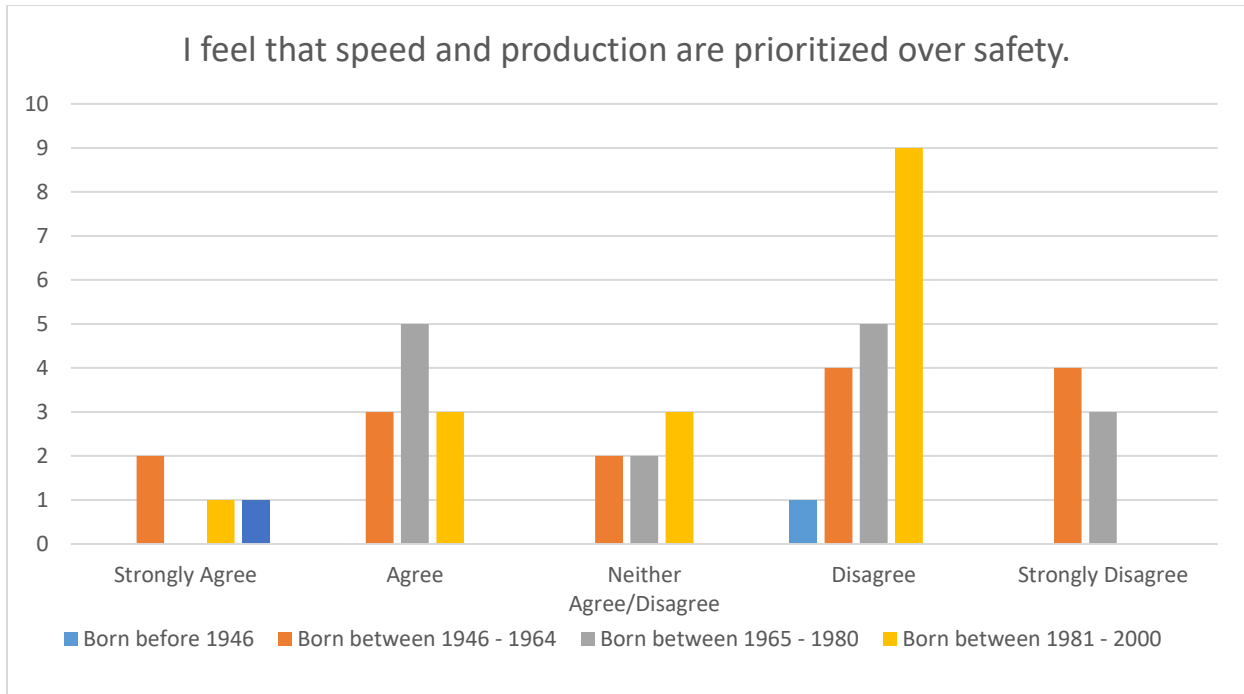| Answer Choices | Responses | |
|---|---|---|
| Born prior to 1946 | 2.17% | 1 |
| Born between 1946 - 1964 | 32.61% | 15 |
| Born between 1965 - 1980 | 30.43% | 14 |
| Born between 1981 - 2000 | 34.78% | 16 |
| Total | | 46 |

Table 9.1

Question nine was developed to determine if there was a correlation between ZSFG's safety culture and their employee's generations. Out of the 50 employees that completed the survey, only 46 of them answered this question. This data was then cross tabbed with Question five to determine if there was any correlation between speed, prioritization and the generations of the employees at ZSFG. However, this analysis was unable to conclude that there was a correlation between any of the generations and the safety culture. The responses were equally distributed among the generations and indicates a nice balance of all generations represented at ZSFG.

Question 10: Job Function:

a. Medical, Nursing, Patient Care
b. Administrative
c. Materials Handler
d. Culinary/Kitchen/Dietary
e. Housekeeping
f. Other

Table 10

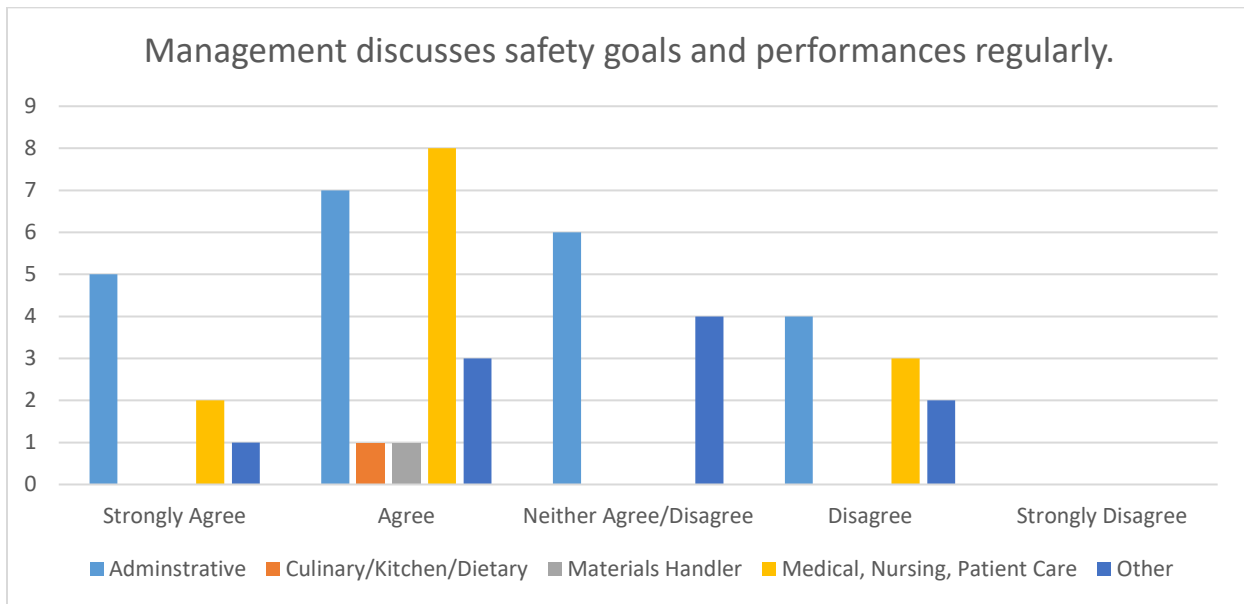| Answer Choices | Responses | |
| --- | --- | --- |
| Medical, Nursing, Patient Care | 28.26% | 13 |
| Administrative | 45.65% | 21 |
| Materials Handler | 2.17% | 1 |
| Culinary/Kitchen/Dietary | 2.17% | 1 |
| Housekeeping | 0% | 0 |
| Other | 21.74% | 10 |
| Total | | 46 |



Table 10.1

Question ten was developed to help understanding the employee's job function at ZSFG. Out of the 50 employees that completed the survey, 46 answered this question. Most of the data represented from this survey is from Medical, Nursing, Patient Care and Administrative staff. Materials Handlers, Culinary/Kitchen/Dietary and Housekeeping staff only had one employee feedback or no input into this survey. This data was then cross tabbed with Question eight to determine if within these departments their managers were discussing safety goals and performances. The data revealed that management was discussing safety goals in the

departments that were represented in the data. However, further inquiry into the departments that did not respond needs to be conducted to determine their employee's feedback.

## Key Findings of Survey Data

The overall results of the survey were that ZSFG has a positive safety culture based on the employee's perception. The research determined the organization has policies and tools in place that supports safety. The employees also confirmed that coworkers, supervisors and managers work together to support safety at ZSFG. One question that stuck out was that speed and production is prioritized over safety. Out of the 46 employees that answered this question, 23.91% agreed that speed and production was prioritized over safety and another 6.52% strongly agreed. Which means that a total of 30.43% of the employees surveyed believe that speed and production is prioritized over safety at ZSFG. This is a key factor/root cause that could be addressed to decrease workers' compensation injuries for the organization.

## Interview Findings

Five key informant interviews were conducted via in-person and phone. Six questions were asked of each participant and they provided their answers directly to the researcher. The interviews were recorded for four out of the five interviews, one of the interviewees did not wish to be recorded.

Interviewee #1

Edward Ochi

Safety Officer, Environmental Health and Safety

Zuckerberg San Francisco General Hospital

Question 1: How many years have you been working in Safety or Workers Comp?

   38 years in the Safety Industry.

Questions 2: What industries have you worked in as a Safety or Workers Comp specialist?

- Manufacturing- Government Shipyard, Aircraft manufacturing plant

- Commercial Industry- Airline

- Consultant

- National Laboratory

- City and County of San Francisco

- Healthcare has been 10 years out of the 38 years of experience.

Question 3: What do you consider to be the highest priorities in creating a successful organizational safety culture?

- We have to have buy-in by leadership, management and workers. When I say buy-in, a better word to use would be ownership.

- The biggest failing is when the Health and Safety Program ends up owning the program. It's everybody's program, we are coaches, we are consultants, but we're not owners. The only way the program works, is if everyone believes they own it.

- Recommends that we have to demystify a lot of health practice and safe practice. They have to understand it in their own terms. We have to follow regulations, but we need to put a human face on that.

Question 4: What do you believe are the benefits in providing a positive work safety culture?

- The only way that you really motivate people, is in terms of the positive, you can make threats, but you will not get positive ownership. If you really want people to own it and believe in it, then that's positive ownership.

- If you do it negatively, then essentially, they don't own the program, it's a penalty for them.

Question 5: What kinds of events, activities or programs have you tried to change a negative to a positive safety culture?

- First, we are trying to get everyone to understand their injuries, not by dollar value, but by in terms of human cost.

- Number two, we are experimenting with safety committees. Food and Nutrition had their first safety committee on their own.

- We are working on needle stick and blood borne and body fluid exposures. We provided the data, which told a compelling enough story, that we actually have champions. We have two physicians who are very engaged and want to change that. Not only did they acknowledge that the numbers are too high, it was something that leadership excepted. Leadership bought into the idea that we have to change it and reduce those numbers.

Question 6: Is there anything you would like to add to our discussion on workplace safety culture?

- The regulations and the standards that the regulators, particularly Cal-OSHA, are a lot more prescriptive. Where they use to lay out more end goals, what you needed to hit.

Where now the regulations in the last 10 years have all been about check boxes on the way to the end goal. This is allowing non-safety professionals to be able to follow the regulations. However, this is taking away the discretion from safety professionals oh how to meet the end goals and providing layer upon layer of regulations to read.

Interview #2

Peggy Sugarman

Workers' Compensation Director

City and County of San Francisco, Department of Human Resources

Question 1: How many years have you been working in Safety or Workers Comp?

41 years in the Workers' Compensation Industry

Questions 2: What industries have you worked in as a Safety or Workers Comp specialist?

- City and County of San Francisco

- Workers' Comp Defense Law Firm- Organizational and Training Director

- Legislative Consultant

- Voters Injured at Work (Owns Company)

- Chief Deputy Director for the State Division of Workers' Compensation and Acting Director (Regulator)

- Vocational Rehabilitation of the State Division, Manager

- Insurance Coordinator

Question 3: What do you consider to be the highest priorities in creating a successful organizational safety culture?

- Top management has to pay attention to it. If you don't have top management worried about it and making sure that there are processes in place to deal with safety issues, then the efforts are not going to work. Then the result of that is going to be more claims, more time off work, and more costs.

- Behavioral compliance from the employees

- Safety committees that upper management is involved in and that everyone buys into.

Question 4: What do you believe are the benefits in providing a positive work safety culture?

- Very broad level, you have more engaged employees. You have employees, who are going to be more satisfied in their work, if they feel that their department or employer is interested in their health, welfare and their safety.

- Better productivity and better employee attendance.

Question 5: What kinds of events, activities or programs have you tried to change a negative to a positive safety culture?

- First, is to take care of your own shop. Our department is now working on our own safety needs. A Safety Coordinator position has been created. Ergonomic needs are now being addressed within house.

- Working with Work Force Development and Health Services System to launch an Office Ergonomics Module.

- Service Employees Union provides for a labor union safety committee that was started in 2014.

- There are now grants available to help pay for needed equipment.

Question 6: Is there anything you would like to add to our discussion on workplace safety culture?

- From a workers' comp standpoint, safety has already failed by the time we get the claim.

Interview #3

Nancy George

Manager, Health and Safety

General Services Agency - Environmental Health and Safety

City and County of San Francisco

Question 1: How many years have you been working in Safety or Workers Comp?

35 years in the Safety Industry.

Questions 2: What industries have you worked in as a Safety or Workers Comp specialist?

- Oil Industry

- Chemical Industry

- City and County of San Francisco

Question 3: What do you consider to be the highest priorities in creating a successful organizational safety culture?

- Leadership support

Question 4: What do you believe are the benefits in providing a positive work safety culture?

- Morale

- Less injuries

Question 5: What kinds of events, activities or programs have you tried to change a negative to a positive safety culture?

- Safety committees, that top level management is actively involved in.

- Top management set the example and became the safety role models for their staff.

Question 6: Is there anything you would like to add to our discussion on workplace safety culture?

- To be successful, regular inspections must occur and there must be action by managers when their employees report any safety concerns.

- Management must provide feedback on their findings and what they are doing to address the safety concerns brought to their attention.

Interview #4

Angela Platzer, RN, MS

Nurse Manager, Workers' Compensation

Occupational Safety and Health Section

San Francisco Department of Public Health

Question 1: How many years have you been working in Safety or Workers Comp?

20 years in the Workers' Compensation and Healthcare industry.

Questions 2: What industries have you worked in as a Safety or Workers Comp specialist?

- Healthcare

Question 3: What do you consider to be the highest priorities in creating a successful organizational safety culture?

- One of the highest priorities is to make sure that your program is staffed appropriately. That you have the right number of nurses, industrial hygienists, safety analysts, ergonomics.

- Ensure that you have a group of people that are passionate about safety, but also know what they are doing.

- The important piece to that is being able to collect, analyze and use the data to figure out the areas that need work. To help us identify the highest risks.

- High prevention component.

Question 4: What do you believe are the benefits in providing a positive work safety culture?

- One, reduced injuries for employees

- Savings in our workers' comp costs.

- Healthier and more productive employees

Question 5: What kinds of events, activities or programs have you tried to change a negative to a positive safety culture?

- At Laguna Honda we had a number of injuries due to patient handling, due to only having manual Hoyer lifts. With a team we evaluated and analyzed our data and determined to replace our manual lifts with electric lifts. It reduced the shoulder

injuries due to the manual pumping and it also came about that the new slings were

safer for the patients.

Question 6: Is there anything you would like to add to our discussion on workplace safety

culture?

- What I've seen through the years from working here, a lot of work place safety seems

    to be driven through Cal OSHA and the different standards, such as blood borne

    pathogens, aerosol transmittable disease standards, heat standard and the violence in

    the workplace standard. I think the nice thing about have the standard and the

    program in writing is that it gives us guidelines. A lot of it we have implemented

    because it is just common-sense stuff, but it is great to have a standard in place to tell

    the staff what to do. These standards have formally driven us all to be safer.

    Leadership has no issue when you tell them that this is what Cal OSHA is requiring

    and they will provide whatever is needed.

Interview #5

Carolyn Jones

Health and Safety Program Manager

San Francisco Public Utilities Commission

Question 1: How many years have you been working in Safety or Workers Comp?

Over 30 years in the Safety Industry.

Questions 2: What industries have you worked in as a Safety or Workers Comp specialist?

- Military- Air Force

- Utility- Sacramento Municipal Utility District

- City and County of San Francisco- Public Works Department

- City and County of San Francisco- Public Utilities Commission

Question 3: What do you consider to be the highest priorities in creating a successful

organizational safety culture?

- Support of senior management

- Having clear goals and objectives

- A system that encourages employees to participate

Question 4: What do you believe are the benefits in providing a positive work safety culture?

- Enormous benefit, because safety professionals are limited in number and they cannot

  be out everywhere all the time. To have an effective safety program depends on the

  front-line employees and the first line, second line supervisors really being engaged

  in the safety effort. So, having a strong safety culture supports them and that effort. If

  you don't have a strong safety culture, as soon as the safety person walks away, the

  employees will be doing something else. They won't be engaged in working safely.

Question 5: What kinds of events, activities or programs have you tried to change a negative to a

positive safety culture?

- We have had times when the safety culture was not great. So, in the PUC we have

  been working on our Safety Management System and Culture for the last four years.

We did a big survey and an assessment. We looked at employees, supervisors and managers to see where there was a disconnect. We wanted to see what the managers thought, and the employees thought about the safety culture. From that we got a lot of recommendations and we are making changes to our safety committee structure. We are trying to get more effective safety committees. The real big push, is that we are trying to make our division safety committees much more effective and have more involvement of the work groups. Also, to make sure that the employees can bring up safety concerns to their supervisors and then those concerns can come up to the safety committee. Their issues will get addressed and then they will get information back on what the committee will be doing to address the issue.

- The past year, we had a serious incidents, injuries and hospitalizations. We wanted to do a safety stand down, which is similar to the military. However, our directory did not like the term stand down. So, we did a safety huddle and wrote up a whole script to emphasize that safety is important and what could happen. There was also a time for people to bring up safety concerns. We asked for all of the supervisors to send us all of the concerns back to us. Then we did a campaign to get this information out and we got about 50-60 % back in participation. We received a lot of safety concerns and feedback from the employees. Even though we encourage employees to report safety concerns, they may not feel comfortable reporting. So, the safety huddles were effective in allowing employees to bring up concerns that were never bring up before. So, it was much more effective than the surveys.

- Ensure that information is communicated more effectively and that the field concerns are being addressed.

Question 6: Is there anything you would like to add to our discussion on workplace safety culture?

- If there is bad management or a bad senior manager, there is this ripple effect and it is going to spill over into the safety culture. It spills over because, certain departments do not work such as an example materials management is not working. They are not ordering gloves in a timely manner, then the employees do not have them. The employees are like "I'm trying to wear my protective gloves, but we don't have them." This then leads to well I'm trying, but the organization is not providing me with my tools. Then they are like the organization is making my job even more challenging. Therefore, it's important to have management ensuring that they are engaged in their safety and will allow their employees to be engaged. If the employees can't get their equipment/tools, then they will not be engaged.

Summary of Key Interview Findings

The results of the interviews portray a wide variety of safety and workers' compensation industry knowledge. The interviewees had a minimum of 20 years of experience. All 5 key informants believe that upper management and employee buy-in/ownership of the safety program will help create an organization with a positive safety culture. Each key informant uses safety committees in their own unique way. Jones's organization uses safety committees and safety huddles to help provide an environment that caters to a welcoming place for their

employees to raise any safety concerns. Jones's organization holds an annual Safety Huddle for the entire organization, very similar to a military safety stand down. They reenact case scenarios that occurred in their organization and work with their employees to understand how it could have been prevented. Managers who are constantly involved with their staff and discuss safety goals and performances on a regular basis, will help support a positive safety culture. This is an example of how an organization should strive to improve their safety culture by including their employees in their safety program.

A finding from all the interviews that was surprising is that no one mentioned employee recognition for achieving safety goals or even improving. The topic was briefly mentioned with positive reinforcement when it was recognized that an employee was working safely. However, employees typically need some form of recognition or an incentive to continue performing well. The significant findings from the survey and interviews, is that ZSFG has a good foundation for a positive safety culture. However, there are still some missing elements based on the interviews and research that the organization is missing that is contributing the high injury rates.

## Chapter 5 – Conclusions and Recommendations

In the beginning of this research it was believed that there was a nonexistent employee safety culture at ZSFG based on the injury data. However, based on the employee feedback on the safety culture survey, employees believed that there is a positive safety culture at ZSFG. They also suggested that policies are in place at ZSFG which support a safe workplace. Additionally, a finding from this study is that employees believe that their coworkers, supervisors and managers work together to support safety. The survey did provide a couple of areas for improvement at ZSFG. There was about 30% of the employees that felt that speed and production was prioritized over safety.

<u>Conclusions</u>

1. The first conclusion is that ZSFG has policies and tools in place that supports safety. This does not support nor oppose the hypothesis that including employees in the injury reduction process will change the safety culture and reduce staff injuries. However, does indicate that ZSFG management has provided their employees with necessary tools and policies to support safety and the ZSFG's injury rates are still higher than the national average. Further research will need to be conducted to determine the true root cause of the injury rates and can be concluded that policies and tools are not the issue.

2. The second conclusion is that ZSFG employees, supervisors and managers all work together to support safety. The hypothesis for this paper was that including employees in the injury reduction process will change the safety culture and reduce staff injuries. This hypothesis was based on previous studies showing that lack of safety cultures in organizations leads to higher injury rates. This finding actually opposes the

hypothesis and indicates that ZSFG's staff are in fact working together to promote
safety. Further research will need to be conducted to determine the true root cause of
the injury rates and it can be concluded that employees not working together is not
the issue.

3. The third conclusion is that Speed and production in certain areas is prioritized over
safety at ZSFG. This helps determine a true indicator that could be the source of the
high injury rates at ZSFG. The hypothesis still can be supported with this conclusion.
The employees would need to be involved in solving this issue. Therefore, this would
include them in the injury reduction process and hopefully reduce the injury rates at
ZSFG over time.

The literature review, specifically work by Molenaar, Park, and Washington (2009)
indicates that to increase a company's safety commitment the following must occur:

1. Make safety a strategic concern;

2. Actively participate in safety;

3. Assign safety responsibilities at field levels, not just safety personnel;

4. Identify and correct unsafe behaviors before they result in accidents; and

5. Offer meaningful incentives for safe performance;

6. Offer incentives to personal for safe performance;

7. Offer opportunities for all personnel to provide feedback regarding safety concerns;

8. Create an understanding that field employees will be thanked for safe performance;

9. Increase the value of incentives; and

10. Increase the frequency of incentives.

<u>Recommendations</u>

1.  By March 30, 2018, ZSFG should publish a declaration to their employees reinforcing that all coworkers, supervisors and managers should continue to work together to support safety.

2.  Based on the research, survey and interviewees feedback, it is recommended that by August 1, 2018, ZSFG establish safety committees in each department of the hospital. The safety committees should be piloted first in the departments that have the highest injury rates, such as Environmental Services (Housekeeping), Patient Handling (Patient Units), and the Emergency Department.

    a.  The safety committees should be implemented by April 2, 2018.

    b.  During these pilots, the departments will be holding safety huddles before and after each shift. They will also hold a safety huddle after an accident/incident occurs.

    c.  During the safety committees the departments will review their injury data and complete a root cause analysis to determine the plan of action to address their injuries.

    d.  If the pilots are successful, then a much larger scale safety huddle should be conducted with all of ZSFG by July 2018 during the staff/management forum.

3.  By April 2, 2018, ZSFG should begin to design and develop a training program for employees and managers that will align from the pilot's findings. The training should provide the managers and staff the necessary information on how to conduct safety committees, safety huddles and safety inspections.

     a. Based on the review of results and evaluation of the pilot training

program, adjustments should be made no later than July 23, 2018.

4. During the staff/management forum in July 2018 ZSFG will formally recognize

the departments that are doing well and those who have improved.

Overall this study found that ZSFG in fact has a foundation for a positive safety culture and needs to implement a few missing key elements to make their safety culture a success. Further research will be needed to conclude if over time the injury rates will reduce with employees included in the injury reduction process.

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Appendices

A. Survey

1. I have the tools and equipment needed to work safely.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

2. Policies are in place to support workplace safely.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

3. My workplace is safe to work in.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

4. I feel comfortable raising safety concerns to my supervisor and manager.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

5. I feel that speed and production is prioritized over safety.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

6. There are no significant compromises or shortcuts taken when safety is at stake.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

7. Coworkers, supervisors, and management all work together to create a safe workplace.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

8. Management discusses safety goals and performances regularly.

    a. Strongly Agree
    b. Agree
    c. Disagree
    d. Strongly Disagree
    e. Neither Agree nor Disagree

9. Age:

    a. Born prior to 1946
    b. Born between 1946 - 1964
    c. Born between 1965 - 1980
    d. Born between 1981 - 2000

10. Job Function:

    a. Medical, Nursing, Patient Care
    b. Administrative
    c. Materials Handler
    d. Culinary/Kitchen/Dietary
    e. Housekeeping
    f. Other