

Synopsis for Dissertation

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TITLE

“A STUDY ON IMPROVING PROCESS EFFICIENCY THROUGH UTILIZATION OF EMPLOYEE CAPACITY BY TIME STUDY TECHNIQUE FOR U.S. HEALTHCARE BPCI INITIATIVE AT PRIMERA HYDERABAD”

INTRODUCTION

Effective functioning of any process requires that the process steps are streamlined and executed with minimal to no errors. This is especially crucial in healthcare settings, where efficiency directly impacts patient care and operational costs. The Bundled Payments for Care Improvement (BPCI) initiative by the Centers for Medicare & Medicaid Services (CMS) aims to enhance patient outcomes while reducing healthcare costs through bundled payments. To support this initiative, PrimEra's Core Measures Department is focused on improving process efficiency by leveraging employee capacity through a Time & Motion Study Analysis. This study will utilize Camtasia Recording Software to meticulously capture and analyze the work processes of employees involved in the BPCI initiative. By identifying and automating repetitive process steps, this research aims to enhance overall productivity and efficiency, thereby contributing to the success of the BPCI initiative at various US hospital branches of Primera.

RESEARCH QUESTION

How can the efficiency of PrimEra's BPCI initiative be improved by identifying and automating repetitive process steps in the Core Measures Department using Time & Motion Study Analysis?

OBJECTIVES

- To identify the specific process steps and record the time taken to complete each step and key areas of improvement in the process steps.
- To identify areas of repetitive process steps and recommend various automation methods.
- To analyse the data obtained from the recordings and find areas where the efficiency of the work is not found and to analyse data obtained to set targets for the employees to improve the overall efficiency.

HYPOTHESIS

Implementing automation for identified repetitive process steps in the Core Measures Department will significantly improve the efficiency of PrimEra's Bundled Pay Care Improvement (BPCI) initiative.

MATERIAL AND METHOD

STUDY DESIGN

Observational Time and Motion Study

SETTING

The study will be conducted in the Core Measures Department of PrimEra's US hospital branches. This setting involves the use of Camtasia Recording Software to capture the work processes of employees involved in the Bundled Pay Care Improvement (BPCI) initiative.

STUDY POPULATION

- Inclusion criteria:

Employees working in the Core Measures Department who are involved in the BPCI initiative and whose work processes are recorded using Camtasia Recording Software.

- Exclusion criteria:

Employees not involved in the BPCI initiative or those whose work processes are not recorded using Camtasia Recording Software.

STUDY TOOLS

Data will be collected using Camtasia Recording Software to capture the process steps. Observations will be recorded in Excel sheets noting down the time taken for each step.

DURATION OF STUDY

The study will be conducted over a period of 4 months, from [Start Date] to [End Date], with data collection occurring twice a week.

SAMPLE SIZE

A sample size of 150 accounts will be studied out of a population of 1500 accounts.

SAMPLING TECHNIQUE

Simple random sampling will be used to select the accounts for the study.

DATA COLLECTION PROCEDURE

Data will be gathered by reviewing Camtasia recordings during working hours. Specific attributes such as the number of accounts handled, unique patient ID, employee code, facility name, EMR used, start times, end times, break times, production times excluding breaks, and

total productivity will be manually entered into Excel sheets. Observations will focus on the time taken for each process step and identification of repetitive tasks.

OPERATIONAL DEFINITIONS

- Efficiency: Measured by the reduction in time taken to complete each process step after implementing recommended automation.
- Repetitive Process Steps: Tasks identified as recurring frequently during the recorded processes.
- Productivity: The amount of work completed by employees, calculated by total production time excluding breaks.

DATA ANALYSIS PLAN

Data will be analysed using Microsoft Excel. Descriptive statistics such as mean, median, and standard deviation will be used to summarize the time taken for each process step. Graphs and charts will be created to visually represent the data. Inferential statistics, including paired t-tests, will be conducted to compare productivity before and after the implementation of automation. Data will be analysed using Excel and statistical software such as SPSS (version XX).

ETHICAL CONSIDERATIONS

Informed consent will be obtained from all study participants. Data security, privacy, and confidentiality will be ensured by anonymizing employee and patient information. Only aggregated data will be reported, and access to recordings will be restricted to the research team.

IMPLICATIONS OF RESEARCH

This research will provide insights into the specific areas where automation can improve efficiency in the Core Measures Department. By identifying and addressing repetitive process steps, the study aims to enhance the overall productivity of the BPCI initiative, ultimately benefiting the healthcare industry and patient care.

REFERENCES

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