

THE USEFULNESS OF SELECTED MANAGEMENT TOOLS IN
IDENTIFYING AND ELIMINATING DYSFUNCTIONAL
WORK PROCESSES IN THE DISABILITY
INSURANCE SECTION, DEPARTMENT
OF SOCIAL AND HEALTH
SERVICES, STATE OF
WASHINGTON

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JERRY DAVID GUHL

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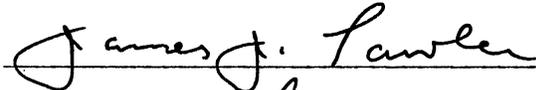
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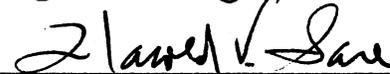
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Thesis Adviser







Dean of the Graduate College

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CHAPTER 1

INTRODUCTION

A middle-aged woman with back problems; an ex-laborer suffering from a lung infection; a retired individual with arteriosclerosis; a young man suffering from a schizophrenic reaction; a middle-aged female, suffering from diabetes which has resulted in blindness; a young girl suffering from cancer; a middle-aged man unable to walk after having both feet crushed in an automobile accident; a marine fighter plane pilot who suffered from severe stomach problems for seven years while being held prisoner in North Vietnam--all of the situations described above share a common factor. These are cases of individuals who have applied for financial aid in the form of either Social Security or Supplemental Security Income financial benefits from the federal government. These cases were processed by a Social Security Administration disability determination unit designed to adjudicate claims of disability made by persons who are suffering from alleged physical or mental disability.

The number of disabled persons currently receiving government financial aid in the form of Social Security or Supplemental Security Income benefits is considerable. At the end of 1974 there were over four million individuals receiving financial aid from the Supplemental Security Income Program.¹ Nearly three and one-half million persons are presently receiving monthly financial benefits in the form of Social Security disability allowances.²

The statistics in the preceding paragraph reflect the status of millions of individuals receiving Social Security or Supplemental Security Income benefits. They also represent individual lives which have been touched by misfortune, and in many cases tragedy, because of the extent to which the individual was stricken by mental or physical disability. The statistical figures represent persons who have lost jobs because of serious illness or accident and persons whose potential for employment is diminished because of mental problems related to drugs and alcoholism. These statistical figures also represent persons who, because of severe mental or physical handicaps suffered from birth, will never be capable of employment.

Another area of consideration is the processing of the mountain of paper work which is created by the millions who apply for Social Security and Supplemental Security Income financial benefits--paper work in the form of applications, medical reports, earning reports, correspondence between the applicant and the state and federal levels of government, and general historical background information concerning the individual applicant. The processing of paper work created by applicants for Social Security and Supplemental Security Income financial benefits is the work of government offices at the state and federal levels. It is these state and federal offices which must deal each day with the many applications for disability benefits.

The purpose of this Chapter is to describe the Social Security Disability Insurance Program and to provide the reader with primary and secondary hypotheses pertinent to the thesis topic.

The Social Security Disability Insurance Program

Persons seeking Social Security or Supplemental Security Income financial benefits usually apply at a Federal District Social Security Office. If the individual is institutionalized because of mental or physical illness or if the claimant is an invalid, the application can be mailed or the applicant can have someone take the application to the Federal District Social Security Office.

The individual, when applying for Social Security or Supplemental Security Income benefits at a district office, is required to give information concerning the alleged disability and names of physicians who have handled the individual's medical difficulties. A file is created in the district office which contains pertinent medical and personal information on the applying individual. The file with these forms is then forwarded to a state disability determination unit.

The state disability determination unit is a part of the Disability Insurance Program which is administered by the Social Security Administration through the Bureau of Disability Insurance.

Initially, the program providing cash benefits to disabled workers over the age of 50 was established by Congress in 1956. Dependent's benefits were added in 1958 and the age 50 requirements were eliminated in 1960. To qualify for benefits, an individual must meet certain coverage requirements which have been modified over the years but still require that workers, disabled after age 31, must have worked five out of the last ten years prior to their disability to be eligible for the Social Security benefit system. For the younger workers, progressively fewer years of employment coverage are required but the minimum is one and one-half years. Originally a worker was required to be disabled six full calendar months before the first month for which benefits were payable, but the waiting period was reduced to five months by the Social Security Amendments of 1972.⁴

The 1972 Social Security Amendments "federalized" the state public assistance programs for the needy, aged, blind and disabled into the Supplemental Security Income Program. The Supplemental Security Income

financial benefits are provided by the federal "General Fund", and the program may be supplemented by state funding.⁵ However, most states elect to place persons who meet the disability requirements in the 100 percent federally funded program.

The Supplemental Security Income population has, to a large degree, the characteristics of borderline cases which have been difficult to adjudicate under the Social Security definition. Supplemental Security Income applicants, based on the experience of the old public assistance disability program, will have had less work experience and education, and will have had more mental, alcohol and drug addiction problems than Social Security disability applicants.⁶ There will also be a higher proportion of women applicants in the Supplemental Security Income Program because of their limited work histories.⁷

At the state disability determination unit, the course of action to be followed concerning alleged disability cases is decided by a team consisting of a physician and a lay disability examiner. The team is concerned with two basic terms in the decision-making process regarding the applicant's alleged disability: (1) disability and (2) substantial gainful activity.

Disability is defined by the Medical Advisory Committee to the Social Security Administration as:

The inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which has lasted or can be expected to last for a continuous period of not less than 12 months.⁸

Substantial gainful activity is defined by the Medical Advisory Committee as:

Any work of a nature generally performed for remuneration or profit, involving the performance of significant physical or mental duties, or a combination of both. Work may be

considered substantial even if performed part-time, and even if it is less demanding or less responsible than the individual's former work, and it may be considered gainful even if the pay is less than his former job or work.⁹

These definitions are pertinent to the decision-making process because they are used by the physician and lay disability examiner to establish the basis for allowance or denial of disability income benefits.

When the application is received by a disability determination unit, a number of procedures are followed. If the claim is for Social Security benefits, the claimant will be requested to ask his treating physician to forward personal medical information to the unit at the claimant's expense. The same procedure is followed if the claim is for Supplemental Security Income benefits, the exception being that the federal government will pay an established fee for medical information provided by a physician. If medical information provided by the applicant for either program is not current or lacks sufficient information about the claimant's specific allegations, the claimant is sent for a medical examination at the expense of the federal government.

The consultative examination must be completed if a comprehensive review of the claimant's allegations is processed. After finalizing the examination report, the medical report is forwarded to the determination unit for processing.

An in-depth review of the medical reports which have been forwarded to the determination unit by either the attending physician or a consulting physician is made by the determination team which will make a decision concerning eligibility of the applicant. The disability determination team must be in agreement before the application for Social Security or Supplemental Security Income financial benefits can go through the final steps of processing. When the determination team has made a decision to

allow or deny a claimant disability income benefits, the file is processed through final work flow channels and returned to the applicant's district office.

Difficulties of the Determination Process

The determination process is by no means without major problems. Lack of medical documentation, delayed replies to disability determination units from claimant-listed medical sources, and disagreements as to the severity of the claimant's disability between members of the decision-making team delay the process.

Administrators are also faced with numerous problems in managing the disability determination program--tight budgets, pressures to hold allowance rates down, increasing file documentation and paper work requirements, and inconsistent policies by the Social Security Administration concerning decisions on determination. The pressures experienced by administrators of the federal disability programs and state determination units are ever increasing as the number of individuals applying for Social Security and Supplemental Security Income continues to increase substantially.¹⁰

Severe actuarial deficiencies have developed in the Disability Insurance system over the last ten years. There has, in the most recent time period, been a substantial increase in applications for Social Security and Supplemental Security Income financial benefits. The Social Security system is pressured even more so now with the recent advent of the Supplemental Security Income Program.¹¹

A further problem faced by administrators of the federal level Disability Insurance Program is the effect of decentralization of the Program. The growth in the number and size of regional offices of the Department of Health, Education, and Welfare has resulted in policy inconsistencies

throughout the total Disability Program concerning disability determination procedures.

The effort to achieve uniform application of the standards which determine disability is thwarted by a complex arrangement of relatively separate administrative entities. This tendency may be accelerated by recent efforts to reorganize administration of the Disability Insurance Program.¹²

The Social Security Administration's proposed reorganization of the Disability Insurance Program will result in greater decentralization of the Bureau of Disability Insurance. Presently, the Social Security cases are reviewed for uniform determination application through case review processing at the Bureau of Disability Insurance in Baltimore, Maryland. The Bureau also reviews cases in which the applicant has applied for Social Security and Supplemental Security Income concurrently.

The Regional Office of the Social Security Administration reviews a statistical sample of all Supplemental Security Income cases for uniformity of the disability determination. Existing standards of case review of the Social Security Administration have been reduced from what was a 100 percent review of State Agency decisions to a national 5 percent sample. Supplemental Security Income cases reviewed in regional offices have been reduced from a 100 percent review to a 7 percent sample.

A decentralized concept, with respect to the Social Security and Supplemental Security Income sample case review, might result in inconsistent policies with respect to case procedures and a continuum of decision-making policy. Each of the federal regions may emphasize a policy which is not consistent with the operation of the total Disability Insurance Program due to the impact of political and economic variance within each region. Decentralization is further promulgated by the possibility of the creation of 10 Disability Insurance Mini-Bureaus.¹⁴ The

implementation of the additional Bureaus would delay efforts to develop a uniform national Disability Insurance Program policy.

An additional problem of major concern to administrators of the Disability Insurance Program and the State disability determination units is the problem of lengthy appeal procedures available to applicants. Should the decision be against the applicant for Social Security or Supplemental Security Income financial benefits, the individual whose claim has been denied financial benefits, may apply for reconsideration. A request for reconsideration after initial review must be filed within six months of the denial notice for a Social Security claim and within 10 days for a Supplemental Security Income claim. While the consideration action is completed by the State disability determination unit, the reconsideration review is handled by personnel other than the determination team that made the initial determination.

If the claimant for Social Security benefits is denied benefits upon reconsideration, he will be given a hearing before an Administrative Law Judge if he files a request within six months of the appeal notice (Figure 1).

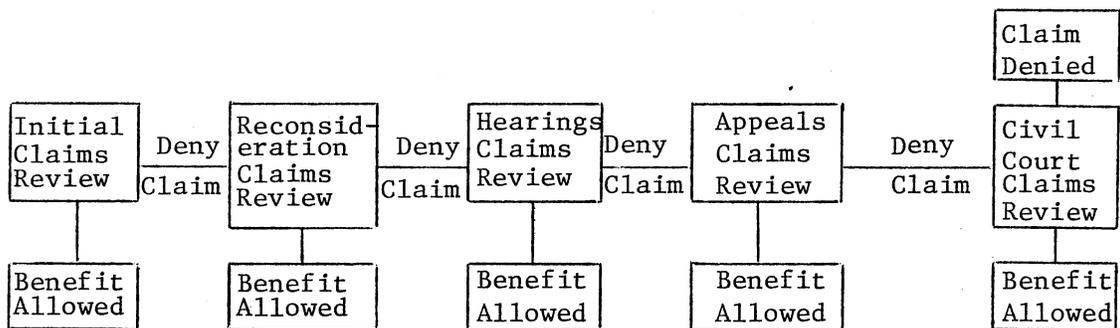


Figure 1. Due Process Appeals Chart

If the claimant had filed for Supplemental Security Income benefits, the appeal period for reconsideration of the initial claim and the hearing by the Administrative Law Judge is 30 days. Under the Supplemental Security Income Program and the Social Security Program, the claimant may make a final appeal to an Appeals Council. All appeal processes should be exhausted before the claimant can pursue action through the civil courts.¹⁵

A major problem with the appeals process is the tremendous amount of federal funding required to finance the procedure. Recently, the Social Security Administration has cited the reversal rate as one of the probable reasons for current adverse cost experiences.¹⁶

Reversals of initial decision upon reconsideration are still substantial (about 30 percent), and hearing examiner reversals of Social Security denials are in the neighborhood of 53 percent. The multi-leveled appeals procedure is time-consuming and the high reversal rates suggest to applicants whose claims have been denied the wisdom of continued appeal.¹⁷

Problems incurred by administrators in the area of reversal rates are further indications of the tremendous responsibilities of managing the Disability Insurance Program. "The present disability determination system is undoubtedly one of the most complex government arrangements in existence."¹⁸

Administrators of state disability determination units share the complexities of the disability determination system with those of the federal Disability Insurance Program. Perhaps the state disability determination unit administrator faces greater complexities because not only must the state administrator answer to the Bureau of Disability Insurance, but also to regional administrators of the Social Security Disability Insurance Program. The state disability determination administrator also has a direct responsibility to the people of the state the

determination unit serves. The state disability determination unit administrator must meet standard procedures and policies as directed by state officials.

Selection of a Disability Determination Unit

For the purpose of investigation and analysis of problems of a state disability determination unit, a particular state unit was selected. The state disability determination unit selected for analysis was the Disability Insurance Section, Department of Social and Health Services, State of Washington. The Washington determination unit is located in Olympia, Washington.

The Washington State disability determination unit was selected because of the convenience of the study unit to the author of this thesis, the consideration that program dysfunctions were created by the substantial growth of program content and personnel since 1974, and because the management of the Section requested that the Section be investigated for possible problem areas.

Statement of the Problem

The proposal for this thesis investigation includes the application of selected analytical management tools to the work flow of a claim for disability income benefits from the Social Security Administration. The purpose of this study is to identify and eliminate five problem areas in the Disability Insurance Section through the application of selected analytical management tools.

The primary objective of the thesis investigation is to identify work processing dysfunctions in the Disability Insurance Section through

the application of selected analytical management tools concerning the following: (1) certain procedures and processing activities concerned with the movement of files and paper work appear to be dysfunctional to Section operations; (2) procedural directives from the Section Head appear to not be clearly disseminated to total staff; (3) based on observation of Section operations, it appears that no centralized authority is in control of functions of the Disability Insurance Section; (4) it appears that written procedures describing the processing of claims by Section lay examiners, medical staff and clerical staff do not exist in the Disability Insurance Section; and (5) based on observation of Section operations, it appears that redundant actions are occurring in the Disability Insurance Section and a system to report the areas of repetitive errors and duplicate work processing is non-existent.

The secondary objective of the thesis investigation is to eliminate the identified work dysfunctions through the application of the analytical management tools concerning the following: (1) certain procedures and processing activities concerned with the movement of files and paper work appear to be dysfunctional to Section operations; (2) procedural directives from the Section Head appear to not be clearly disseminated to total staff; (3) based on observation of Section operations, it appears that no centralized authority is in control of the functions of the Disability Insurance Section; (4) it appears that written procedures describing the processing of claims by Section lay examiners, medical staff and clerical staff do not exist in the Disability Insurance Section, and (5) based on observation of Section operations, it appears that redundant actions are occurring in the work flow of the Disability Insurance Section and a system to report the areas of repetitive errors and duplicate

work processing is non-existent.

Limitations which might be encountered in this study are initial apprehension by staff concerning the investigation of work functions, negative attitudes toward change, and management concerns regarding the study findings. There were also limitations in the amount of funding available for analysis which required that all data collected had to be processed manually without the use of an automated data processing system.

It is hoped that the results of this thesis investigation will provide management of the Disability Insurance Section with valuable tools to improve work methods and claims processing.

FOOTNOTES

¹Caseload Report of Disability Insurance Units, Social Security Administration, Disability Insurance Programs, HEW-Region X (Seattle, 1974).

²U.S. House of Representatives, Committee on Ways and Means, "The Committee Staff Report on the Disability Insurance Program" (Washington, D.C., July, 1974), p. 3.

³U.S. House of Representatives, p. 17.

⁴U.S. House of Representatives, p. 2.

⁵U.S. House of Representatives, p. 2.

⁶U.S. House of Representatives, p. 6.

⁷U.S. House of Representatives, p. 6.

⁸U.S. Department of Disability Evaluation-Social Security, Health, Education and Welfare (Washington, D.C., 1970), p. 6. This work is designed to be used by physicians hired to conduct consultative examinations.

⁹U.S. Department of Disability Evaluation, p. 6.

¹⁰U.S. House of Representatives, p. 1.

¹¹U.S. House of Representatives, p. 1.

¹²U.S. House of Representatives, p. 7.

¹³U.S. House of Representatives, p. 31.

¹⁴U.S. House of Representatives, p. 31.

¹⁵U.S. House of Representatives, p. 8.

¹⁶U.S. House of Representatives, p. 10.

¹⁷U.S. House of Representatives, p. 10.

¹⁸U.S. House of Representatives, p. 39.

CHAPTER II

REVIEW OF LITERATURE

Work measurement and methods to improve work efficiency have been studied and practiced since the end of the nineteenth century. This Chapter is a review of the pertinent research completed by various work analysts and available methods to increase work efficiency.

The status of work study has undergone considerable change since its inception, progressing from suspicion of the basic concepts of work study by the public and management in the early 1900's to major training in work study by universities and management consultants in the late 1960's and early 1970's.

Frederick Taylor is credited as being the first individual to actively study work processing and the means to improve work efficiency. Taylor introduced and developed many new principles of management together with techniques designed to systematize and standardize the planning and control of industry.¹

Taylor first measured his workers' performance and established production levels or operation times from the resulting past performance records. Taylor found such measurements and the production goals established on ordinary historical performance records to be unreliable because they were based on the same poor performance that he had noted originally. His next step was to use a stop watch to establish the time to perform a given operation.²

Taylor's work resulted in four major concepts of scientific management. These four concepts are summarized below:

1. Management must go into a plant and observe, record, tabulate and study every element of a job.
2. Management is responsible for seeing that the worker is completing assigned work in an efficient manner. If not, the worker should be transferred to a new position.
3. Management is responsible for scientifically selecting and training a new worker or a worker who is transferred to a new position.
4. Management is responsible for planning the work completed by the worker as to the needs of the job.³

The essence of Taylor's concepts of work study and production methods improvement is the need for a basic change in attitude of both management and the employee. Taylor wrote that to be successful, management and the employee were going to have to substitute friendship and cooperation for hostility and suspicion and eliminate the strict sense of self-interest.⁴

Soon after Taylor began his work another work analyst, Frank Gilbreth, initiated studies in the area of motion economy as opposed to the time study concept of Taylor.

Gilbreth was also involved in the development of other useful tools of work measurement. One such tool was the Layout Design Chart. A Layout Design Chart prepares the functional arrangement of equipment in an existing or contemplated work system. It includes the planning necessary to determine and develop a physical relationship between grounds, buildings, equipment and operations to provide the maximum degree of

economy and effectiveness in processing.⁵

Gilbreth noted that the objective of a Layout Design Chart is:

To establish the location of equipment and facilities in such a manner as to permit the quickest flow of materials and most efficient movement of personnel. The difference between a good and bad layout design is often the difference between an effective operation and an ineffective one. An inadequate layout imposes penalties on an organization that adversely affect operating costs, maintenance costs and labor relations.⁶

In addition to his work in the development of the concepts of motion economy and layout design, Gilbreth designed charts which, through the application of symbols and flow lines, would graphically show the flow of work throughout an organization. His early renditions of charts had 40 symbols for plotting activities. Since that time the number of basic symbols has decreased but the format variations for process charting are almost innumerable. Because of format variations, customized applications can make charts much more useful for particular situations such as computer procedures or forms flow analysis.⁷

Gilbreth's basic chart was the Flow Process Chart. This chart consisted of symbols which represent various occurrences along the work flow line. This Chart is used to map out work direction and time. The data from Flow Process Charts were then transferred to Gilbreth's second chart, the Procedure Flow Chart.⁸

The Procedure Flow Chart is a horizontal chart depicting the work flow on a continuous horizontal flow line. Even the most complex systems can be charted with a Procedure Flow Chart. The various origins of documents and operations can be entered on separate lines. The number of levels is determined by the number of lines of flow which occur simultaneously. On these lines of flow are symbols representing the action of the operation at a particular position on the flow line.⁹

The complex development of the Procedure Flow Chart grew out of a food warehouse study by a consulting analyst in 1950. Through the use of graphic charts, the consultant explained the entire sales order-processing warehouse-invoicing and shipping procedure to office supervisors. Even men with 25 years service had never before understood all the details of the related paper work systems in other departments. This realization of the enormous value of such a tool which could display all work processes simultaneously led to the development of the Multicolumn Procedure Chart.¹⁰

Mullee reports that the Multicolumn Procedure Chart is useful in a number of areas of administrative analysis: spotting duplication of procedures, revealing bottlenecks and processing problem areas, and indicating those areas where the combining of activities, job enlargement and mechanization would be beneficial to work flow.¹¹

There are, however, counter arguments as to the reliability of Gilbreth's charts. Riggs writes that: The inherent weakness of charts is that someone unaccustomed to the unique symbols or format will have little idea of what the charts tell.¹² Brooker furthers the counter arguments when he writes:

A danger in the development or use of symbols is due to the fact that they are selective...they do not express all that is given but only the aspects and relations considered important for the purpose at hand; hence, there always exists an aspect of hazard and adventure in the symbols from which the charts are built...symbols then, by their nature, readily take on a normative; being abstract, they tend to contain only that aspect of the referent which the selecting and symbolizing agent considers important or useful...¹³

The work measurement aspects of Taylor, Gilbreth and other work analysts brought the concept of work measurement to public attention. However, the social, ethical and moral rightness of work measurement

became a controversial issue of the day, culminating in a full scale Congressional investigation of scientific management in 1912.¹⁴

The orderly progress of work study continued until World War I. With the advent of World War I came unprecedented demand for increased production. Because the work study methods of analysts such as Taylor and Gilbreth had been accepted as useful tools for increasing production efficiency, management turned to all available work analysts. The demand was so sudden that there were not enough qualified work analysts to meet demand and numerous unqualified work analysts entered the drive to increase efficiency. The result was almost disastrous for the concept of scientific management. Fortunately, after World War I, an increasing number of sound work studies were conducted by well-qualified practitioners. Work study procedures underwent considerable development as emphasis swung to application of predetermined time standards.

During the early 1920's, other efforts were being made to standardize work measurement concepts. A. B. Segur worked to develop time measurement standards with Frank Gilbreth. From the work came Segur's Law: "Within practical limits the times required of all expert workers to perform true fundamental motions are constant."¹⁵ From this Law came the base of development for Motion-Time Analysis. However, Segur did not actively keep records of the concept he developed, and it was not until the 1945 May issue of Factory Management and Maintenance Magazine that an article was published on Motion-Time Analysis.¹⁶

By the late 1940's, a concept known as Methods-Time Measurement was developed by Harold Maynard. This method is used today as a tool for standardizing the times in which work functions should be completed for numerous aspects of the private and public sectors. The method of

measurement developed by Harold Maynard is the only time measurement system available to the general public.¹⁷

The method of standardized time motion measurement is so strong that a number of time measurement tools have been developed. The General Electric Company developed Motion Time Standards (MTS) and Dimension-Motion Time (DMT). By the year 1950, there were three independently-developed systems of predetermined motion time systems available to industry: Motion Time Analysis (MTA), Work-Factor, and Methods-Time Measurement (MTM). Between 1949 and 1951, a system called Basic Motion Time BTM, was developed by J. D. Woods and was made available to general industry.¹⁸

While major developments were occurring in time measurement systems, government analysts were working toward new directions in work measurement. One work measurement tool developed during this period was the Work Distribution Chart. This chart is useful in two areas: analysis and costing. In analysis, the Chart is used to point up poor distribution of workloads, lack of specialization of function, poor utilization of particular skills and duplication of function.¹⁹ In reference to costing, the Work Distribution Chart predicts cost needs in terms of work effectiveness and employee efficiency.

Ben S. Graham has noted that the Work Distribution Chart has possibilities as a top level "steam-shovel" tool.²⁰ Close noted that:

The basic function of the work distribution analysis is to find the high volume activities. We want to seek out those areas in which we have the largest concentration of time, effort and cost. The chart is concerned with the larger aspects of the job, not the details.²¹

Although the popularity of the concepts of work measurement has grown consistently, there is negativism toward many of the work study

concepts and analytical tools. Work measurement and production improvement methods often require complicated studies and calculations. In addition, they can be economically justified only for highly repetitive, short-cycle work such as electronic assembly and packaging. This leaves great amounts of less repetitive, short-cycle work, such as maintenance.²²

Many times management will be the major culprit of inefficient work production particularly in the area of clerical functions. Management reaction to problems in clerical processing, production line slow-downs and management ineffectiveness is, "I can't be bothered with these details - Just work it out any way you like, just get it done."²³

A further problem is that the old Bromide, "people resist change", is still as applicable today as it was during the early scientific management era. People are afraid that change will affect their lives in a negative way through the loss of position, status, or income.²⁴

Many of the problems confronting the public administrator applying the concepts of work measurement and scientific management are peculiar to government. Because of the inconsistency of service-oriented government workloads, work measurement has been somewhat less effective in the public sector compared to the private sector. There are a number of reasons for the ineffectiveness in government besides the one previously mentioned. Because a system of political patronage still exists for appointed officials, changes in the heads of agencies, departments or commissions are apt to occur with each turnover of elected officials. New appointees chosen on the basis of political spoils are unfamiliar with the requirements of their new position.²⁵ Also, the private sector has measured performance. Where standards and measurement techniques

do not exist, it is difficult to measure effectiveness and efficiency.²⁶

Another problem is that government budgets are based on history and are not flexible. The result is wasteful spending in some areas and a surplus of funds in others. Government managers are also dependent on a higher authority and on rules and regulations; this promotes inefficiency and smothers creativity.²⁷

A majority of work measurement and production improvement methods frequently require weeks of difficult, costly training before they can be used. They also produce a great deal of time-consuming paper work which makes updating of time standards difficult and expensive. In general, government simply does not have the funds available for expensive work improvement studies.²⁸ Nevertheless, although there are numerous dysfunctional properties of work measurement, government, as well as the private sector, is faced with increasing amounts of paper work. Organizations continue to grow in size as more people, more departments, more difficult types of technology and problems of understanding, and communications become greater and greater.²⁹

Today, work measurement is being used by managers to handle the increasing workloads and growing staffs effectively. Zanlin has written:

Work measurement is being used to increase productivity, reduce costs, improve the utilization of facilities, calculate accurate work costs, improve planning, establish realistic work targets, schedule workloads, and form the basis for wage incentive programs.³⁰

Bloomfield, in recent studies, has found that:

Through the use of production controls, quality controls and the development of a performance measurement system using Methods-Time Measurement standard data, employee performances can be increased significantly.³¹

Stone has noted that the inclusion of work measurement as a part

of the total program now ensures that employee effectiveness is accurately monitored. Productivity is no longer gauged from prior costs or hours except for like jobs, nor from standards supplied from other agencies based on their experience.³²

Work measurement tools such as Gilbreth's and Graham's Flow Procedure Data Charts and Procedure Flow Chart are being applied to present work flow studies. Smith noted that:

The combination of task list outlines and narratives, specialized flow charts and questionnaires previously completed by the staff, provides a type of systems analysis that gives us a photograph of how an office does its work currently.³³

Contemporary management in the public sector accepts and applies the concepts of work measurement and scientific management. Balk stated that:

There is no real technological difficulty in measuring a large percentage of the work that is done in government. The reason is that many tasks are relatively routine and we can apply well-established techniques to understand the nature of the work being performed.³⁴

The review of the literature has revealed that management application of the concepts of work measurement and scientific management has grown significantly since the first works of Taylor. There is an indication that the knowledge and proper application of these tools will play an important part in the role of tomorrow's manager.

FOOTNOTES

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- ⁸Ben S. Graham, Paperwork Simplification (Ohio, 1962), p. 11.
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- ²¹ Guy C. Close, Jr., Work Improvement (New York, 1960), p. 149.
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- ²⁶ Imundo, p. 90.
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CHAPTER III

PROCEDURE

In this chapter, the primary and secondary purposes of the thesis will be discussed, the reasons for subject selection and the study subject will be described, and a description of the selected tools of analysis will be presented.

Purposes of the Thesis

The primary purpose of the Disability Insurance Section management study was to determine whether selected management tools could be applied as a method of identifying administrative problems.

The secondary purpose of the study was to determine whether selected management tools could aid in eliminating problem areas.

Subject Selection

The following facts prompted the decision to proceed with a study of the Disability Insurance Section. These facts are as follows:

- (1) The number of employees in the Section has grown from 50 to 170 in a period of one year.
- (2) The caseload has doubled from 20,000 cases a year before January 1974 to 40,000 claims per year after January 1974 primarily because of the addition of the Supplemental Security Income Program.

- (3) Available research material from data provided by the Social Security Administration and by the House Ways and Means Staff Reports has indicated that severe actuarial problems do exist in the state level determination units.
- (4) Production standards in the Section do not reflect present staffing quotas.
- (5) Administrators of the Section note bottlenecks in the various processing points of work flow.
- (6) Staff complaints indicate that written procedures for case processing are absent.
- (7) Physical layout of the plant lends itself to communication problems.

Description of the Study Subject

The study subject is the Disability Insurance Section, Department of Social and Health Services, State of Washington. The basic function of the Disability Insurance Section is adjudication of claimant applications for disability insurance benefits from the Social Security and/or Supplemental Security Income programs. The organizational structure of the Section consists of the Section supervisor, three operations supervisors, seven unit supervisors, sixty adjudicators, one chief medical consultant, fourteen part-time medical consultants, five clerical supervisors, and sixty-one clerical employees.

The three operational areas operate out of four buildings. The buildings are one-story single units located in a building complex. The central services operational area is concerned with the function of providing support to operations areas one and two. The functions of

personnel in the central services area are the initial intake of the file and of all mail coming into the operations area, maintenance of file records, maintenance of active and inactive control cards, the out-processing of all mail and files, the assembly of all files completed for out-processing, the accounting procedures, the review of randomly selected files for indication of medical development or technical errors, and the maintenance of a control card counting system which is continuously updated from Section and federal production records (Figure 2).

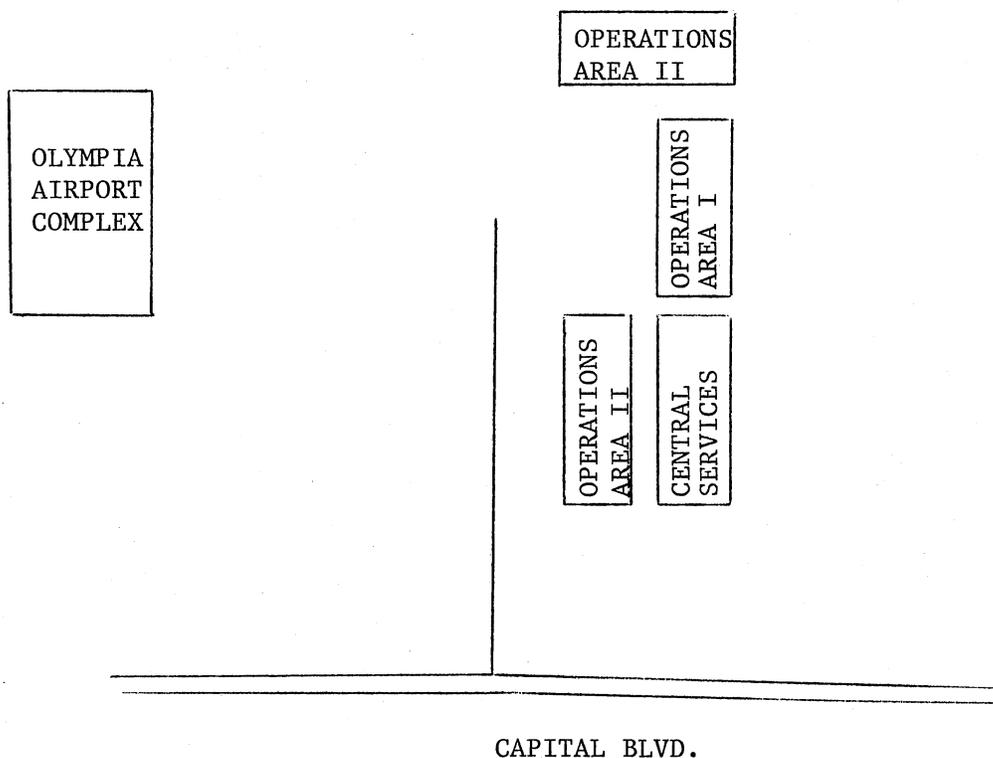


Figure 2. The Disability Insurance Building Complex

Personnel in operations areas one and two process the files and

all items related to the adjudicative process. The two operations areas are divided geographically on the basis of the sections of the State of Washington from which applications of claimants are received and processed. Operational area one personnel adjudicate claims which were filed at social security district offices in Tacoma, southwestern Washington and eastern Washington. Operations area two personnel adjudicate claims which were filed in Seattle and northwestern Washington.¹

The responsibilities of personnel in the operations areas are varied and numerous. The clerical duties of area personnel are concerned with file intake, typing for the adjudicator, assisting the adjudicator in case processing, movement of the file through the operations area, and selected clerks review files for indication of clerical or technical errors.

In the operations areas where the adjudicative process occurs, there are two area file intake clerks. It is the responsibility of the operations area intake clerks to review the file when it arrives in the operations area from central services. The intake process is a very involved one which includes the in-depth file review by clerical staff for file type and identification. The intake clerks also have the responsibility of counting and assigning incoming files and the daily tabulation of the number of files each adjudicator receives.

Other personnel in the operations areas includes the operations area supervisor, unit supervisors and the lay disability examiners. The area supervisor has the overall responsibility of case production in the operations areas and of maintaining efficient work flow. The unit supervisor is concerned with the function of individual units in the operations areas. The lay disability examiners have the responsibility

of making the decisions on the various claims which are processed through the operations areas.

Medical consultants are also located in the two adjudicative processing areas. The function of the medical consultants is to assist the lay disability examiner in determining answers to medical questions and to weigh medical evidence which is presented during the decision-making process.

Description of the Selected Tools of Analysis

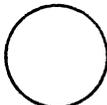
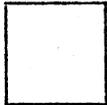
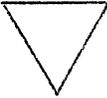
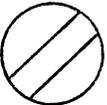
In this section of the thesis, the seven major tools used in analysis of the Disability Insurance Section will be discussed. The seven tools are: Procedure Data Chart, Procedure Flow Chart, Multi-Column Process Chart, Work Distribution Chart, Work Flow Diagram, Motion Economy Analysis, and Linear Responsibility Charting.

The scientific approach was used to establish guidelines for the analysis process, namely: (1) select a situation to study; (2) get all of the facts; (3) analyze the facts; (4) develop the improvement, and (5) apply the improvement.

Procedure Data Chart. The original Procedure Data Chart was created by Frank Gilbreth, and further developed by Ben S. Graham. The Procedure Data Chart is usually an 8½" by 11" printed form with two major sections. The two major sections of the form are: the heading and the body. The heading has an area for summary of the number of respective work flow symbols, the number of the chart, work description and charting dates. The body of the chart contains columns for: (1) step number; (2) the appropriate symbol to designate the type of activity for each step; (3) a brief description of the activity; (4) distance travelled,

and (5) notes explaining details of the step (Figure 3).

In the first column of the body of the chart are shown the various activities as they were performed in sequence in a process connected by a flow line. In the second column is a brief explanation of each activity. The third and fourth columns report distance and quantity respectively, and the fifth column reports time. The symbols on the chart express the basic types of activities. The symbols used are those of Gilbreth and Graham and are as follows (with an example to illustrate each):

- (1)  A circle is an operational symbol. (The separation of file material or the placing of file material or the placing of file material in an inbox would be symbolized by the large circle.)
- (2)  The small circle is the symbol for transportation. (The movement of a file from a file cabinet to a holding tray is an example of the symbol.)
- (3)  A square is the symbol for an inspection. (The checking of selected items in a case file would be symbolized by this symbol.)
- (4)  An inverted triangle signifies that subject material is being held. (The filing of material or the temporary holding of a case file in an inbox would be symbolized by the inverted triangle.)
- (5)  A circle with diagonal lines across the circle is the symbol for an add-on operation. (The

addition of a social security number from one form to another would be symbolized by the circle with diagonal lines.)

(6)



A circle with a solid circle in the center of the circle is the symbol for a creation operation.

(When a new form letter is required to be sent to a claimant, the new letter would be reflected by this symbol.)

Procedure Flow Chart. Everytime a Procedure Data Chart was completed, the major operation positions were transferred to the Procedure Flow Chart. The Procedure Flow Chart is a horizontal chart depicting the work flow on a continuous horizontal line. Even the most complex systems can be charted with a Procedure Flow Chart. The various origins of documents and operations are entered on separate lines. The number of levels is determined by the number of lines of flow which occur simultaneously. On these lines of flow are symbols representing the action of the operation at a particular position on the flow line (Figure 4).

Whenever a multi-copy form is originated, the various parts are indicated by the use of a square with the title or number of the part written inside the square. The squares are bracketed to indicate the origin of the form and copies of the form occurred in the single writing. The charting of an "effect" when a document is used to originate or add another document, is done by the means of a V either in the normal position or in an inverted position.

The Procedure Flow Chart does not usually represent all of the facts; the facts of the total operation are on the Procedure Data Chart.

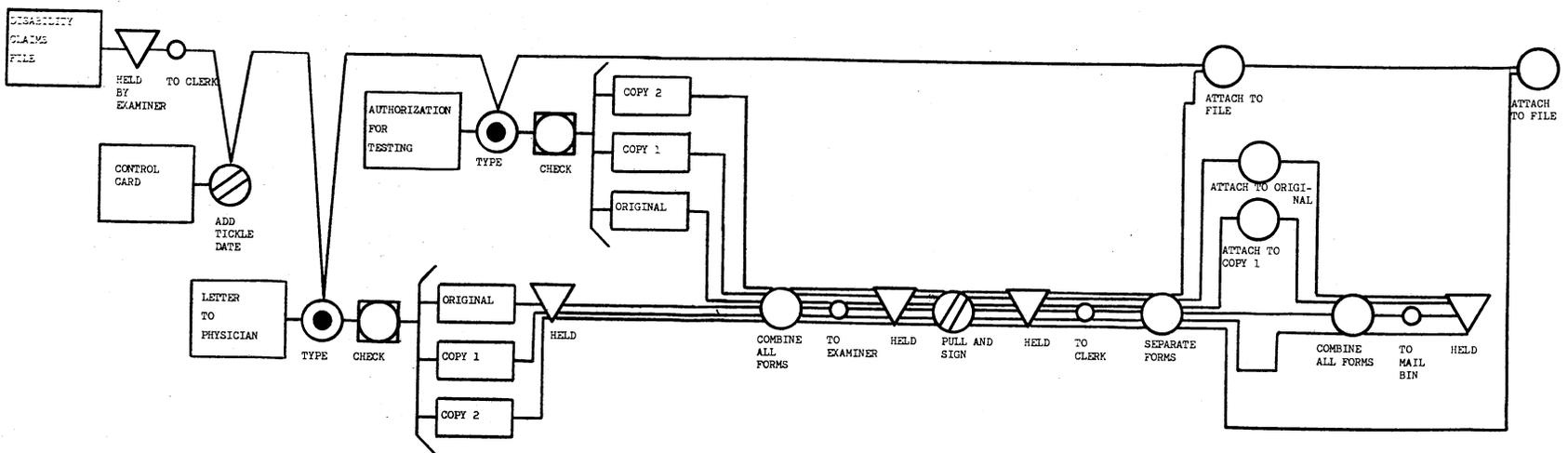


Figure 4. Procedure Flow Chart

A review of the two charts will present the analyst with a continuum of the work flow.

The benefits gained from application of the Procedure Flow Chart are numerous. The first value is that completed information on paper flow is made available. Secondly, problem areas are brought out into the open. Thirdly, areas in which duplicated actions occur become prominent. Finally, areas are recognized in which machines might be applied to eliminate many of the repetitive tasks being manually completed by employees.

Multi-Column Process Chart. Analysis of data presented by the Multi-Column Process Chart is useful in sighting targets for improvements. The same symbols which are applied to the Procedure Data Charts are applied to the Multi-Column Process Chart. When the analyst is working with the Multi-Column Process Chart, symbols representing work completed by individuals at separate work stations are placed on a separate line (Figure 5). As an example, Clerk A checks block A on a form. The form is then sent to Clerk B and again block A is checked on the form. Similar action will be completed by Clerk C when that clerk receives the form. When this action is applied to the Multi-Column Process Chart, the analyst can readily note the duplicating processing activity which is occurring. The action may have been previously unnoticed. If it is determined that the duplicate checking procedures are not needed, then the analyst might recommend that Clerk B and C be removed from the flow.

Data presented by the Multi-Column Process Chart enables the analyst to alleviate problems in these areas: (1) backtracking procedures, (2) poor work distribution, (3) an uneven workload, and (4) duplication of work flow procedures.

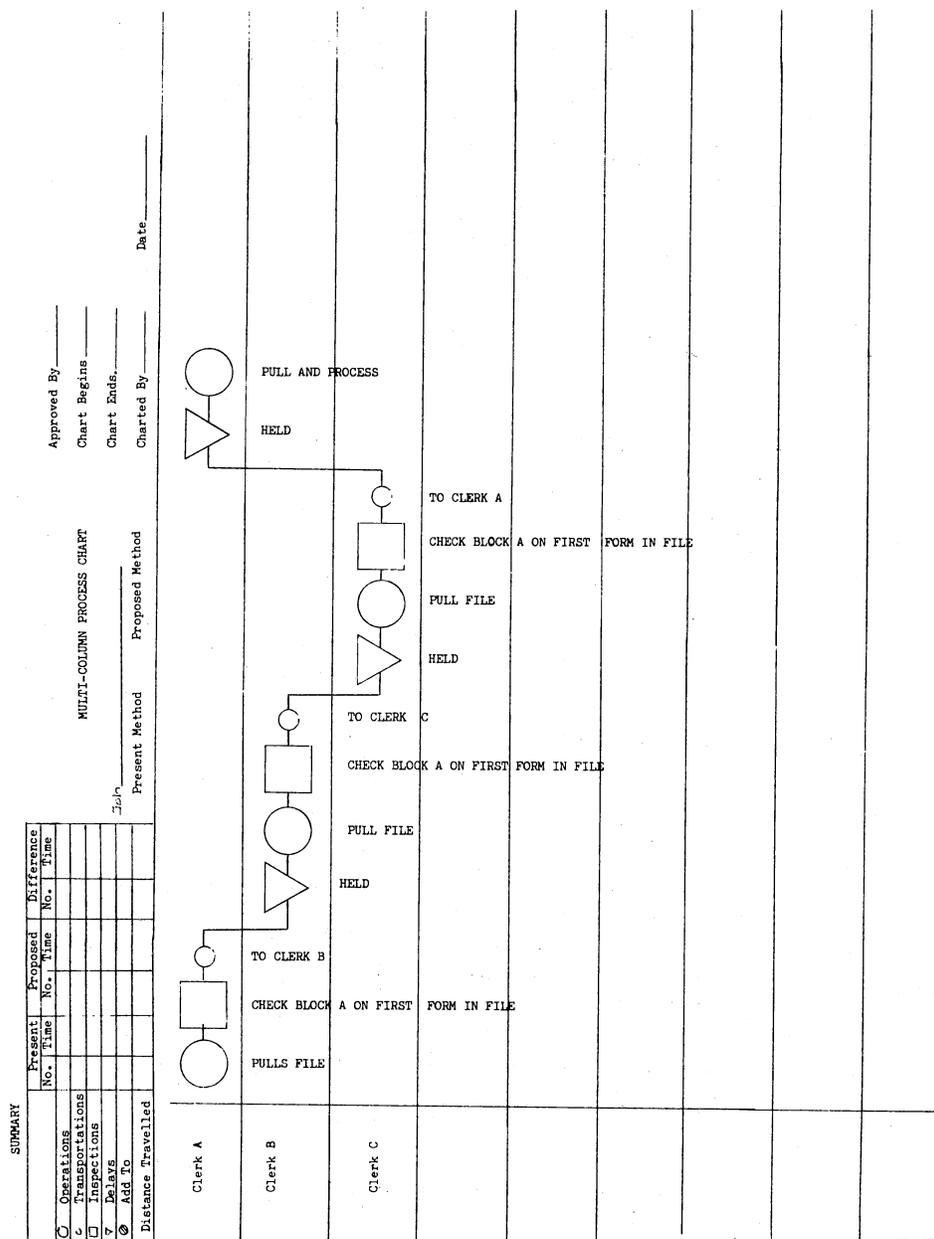


Figure 5. Multi-Column Process Chart

Work Distribution Chart. The basic function of the Work Distribution Chart is to identify high-volume activities of the larger aspects, rather than the details of a job. In work distribution analysis one seeks to find those areas of largest concentration of time, effort and cost.

There are three steps to be followed in the development of work distribution analysis: (1) define the activities of the department or unit (Figure 6), (2) define the task included in each activity on the Task Sheet (Figure 7), and (3) obtain and extend the Task Sheet data onto the Work Distribution Chart (Figure 8). When the activities have been defined, the employee will write on the Task Sheet the activity the employee is involved in each 15 minutes of the eight-hour work day. After the employee has recorded work activity on the Task Sheet for three days, the data is transferred to the Work Distribution Chart. Upon completion of placing the Task Sheet listings onto the Work Distribution Chart, the analyst will take three views of the Chart: (1) the organizational view of the unit, (2) the departmental view of the unit, and (3) the view of the activity of the employee who completed the Task Sheet.

Analysis of data presented by the Work Distribution Chart assists the analyst in defining and selecting work flow problems and will point out activities that should be eliminated. The Work Distribution Chart will show improper balance in workloads and therefore, the supervisor can use the charts as a guide sheet in considering areas of possible improvement when discussing the charts with employees.

Work Flow Diagram. Another selected tool of analysis is the Work Flow Diagram. This management tool was selected for application because of long distances between work stations and dysfunctional movement of

ACTIVITY LIST
FOR WORK DISTRIBUTION CHART

DEPARTMENT:		SECTION	SUPERVISOR:	DATE:
ACTIVITY NUMBER	ACTIVITY (FUNCTIONS)			

Figure 6. Activity List

Title				TASK DATA SHEET			Name		
Date							Dept.		
Time	Item	Interruptions Phone	Other	Qant	Item No.	DESCRIPTION	Total Time	Total Time	Unit Time
8:00									
8:15					1				
8:30									
8:45					2				
9:00									
9:15					3				
9:30									
9:45					4				
10:00									
10:15					5				
10:30									
10:45					6				
11:00									
11:15					7				
11:30									
11:45					8				
1:00									
1:15					9				
1:30									
1:45					10				
2:00									
2:15					11				
2:30									
2:45					12				
3:00									
3:15					13				
3:30									
3:45					14				
4:00						(Detail telephone)			
4:15					A				
4:30									
4:45					B				

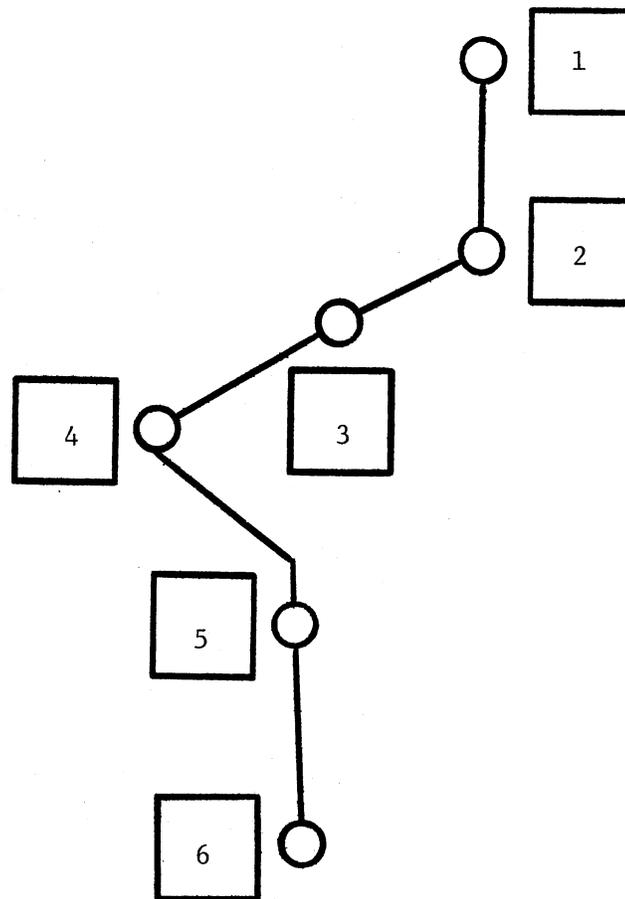
Figure 7. Task Data Sheet

Section personnel in completing various work processes. In many cases, the Work Flow Diagram is a supplement to the Procedure Flow Chart. The Work Flow Diagram, when completed correctly, will picture movement of paper work and personnel in relation to work stations in a work area and distances involved in the movement. Analysis of the Work Flow Diagram assists the analyst in better understanding the relationship of each work station to every other work station and pictures the entire procedure.

Through the application and analysis of the Work Flow Diagram, the analyst will be able to increase productivity, reduce material transportation and handling, and better utilize machinery, manpower and services. Management should recognize changes in morale and health and safety of employees if changes are implemented when indicated as needed by the analysis of the Work Flow Diagram (Figure 9).

There are numerous rules and factors in applying the concepts of the Work Flow Diagram. Work flow design should allow work to follow straight lines with a minimum of backtracking or cross travel. Employees having the most frequent contact should be located within proximity of each other and all aisles and passageways should be of a proper width so as not to hinder movement of personnel or equipment. Ample room should be provided for employee desk space and for all equipment related to the employee's job.

Motion Economy Analysis. The objective of Motion Economy Analysis is to find the best work method. It eliminates wasteful and useless effort of an individual. When the analyst is applying the concept of Motion Economy Analysis, there are a number of rules which should be followed. Motions should be simultaneous with the hand and arms moving



1. Form to Posting Clerk
2. Form to Review Clerk
3. Form to Accounting Clerk
4. Form to Duplicating Clerk
5. Form to Processing Clerk
6. Form to Mail Clerk

Figure 9. Work Flow Diagram

in opposite symmetrical directions. The hands should follow motions confined to the lowest classifications possible to perform work satisfactorily. The employee should use momentum whenever possible, with it being reduced to a minimum if it must be overcome by muscular effort. When applied to clerical activities in the Section, Motion Economy Analysis was a useful tool to increase the efficiency of the employees.

Linear Responsibility Chart. Originally, the Linear Responsibility Chart was developed as a tool for organizational analysis. It is used to cut overhead costs, break bottlenecks, find training needs, spot responsibility gaps, balance out workloads, clear up misunderstandings, weed out paper not related to particular jobs, simplify control and speed up decisions. A common application of the Linear Responsibility Chart is to plan and carry out a one-time organizational overhaul, such as improving procedures, or decentralizing authority (Figure 10).

The Linear Responsibility Chart is prepared by first deciding exactly what is to be analyzed. It is to be remembered that functions are performed by organizational units, but the work is performed by people, therefore, separate charts should be made for each. The scope of the charts should be limited; mixing executive and clerical staffs on the same chart will create problems. Therefore, executive and clerical staffs should be charted on separate charts.

On the Linear Responsibility Chart, the work segments at which policy level determinations are made provide the initial starting point for the analyst working down the chart with an item of lesser scope than the one above. Each work description on the chart must be clearly defined. Since the concept of the Linear Responsibility Chart is to identify what people do in the organization and not how important they are, each task should

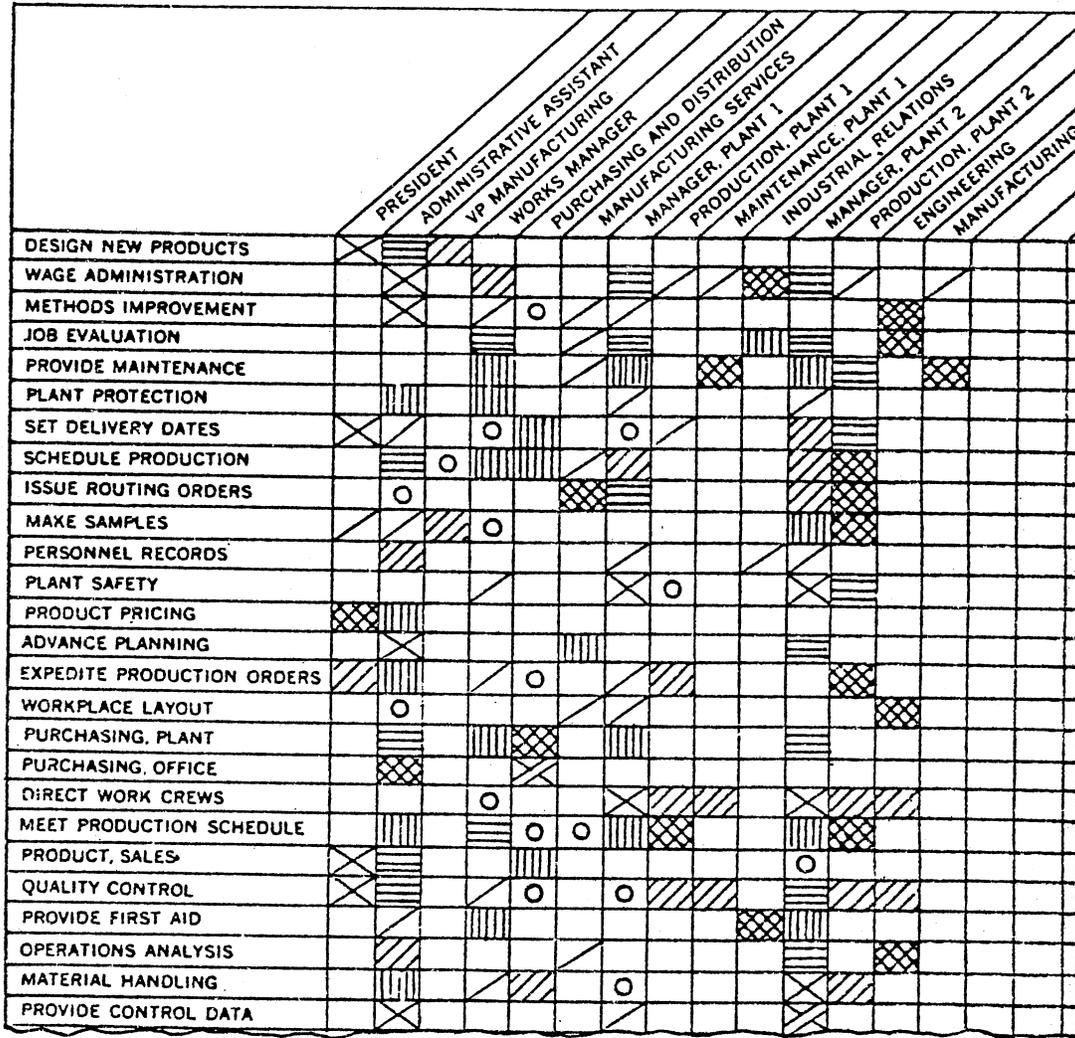


Figure 10. Linear Responsibility Chart

begin with an active verb, i.e., "work...". Each item must have an unique, well-understood meaning. The appropriate predetermined symbols are added to the chart. There must be at least one "work is done" symbol on each horizontal line on the chart, although other symbols may or may not be called for there. It is possible that the same task will appear on two or more Linear Responsibility Charts.

Summary

The primary objective of the research activity discussed in this Chapter was to describe to the reader, the subject selection, reasons for the subject selection and to present a discussion of the analytical management tools used in a study of the Disability Insurance Section. The discussion of the data, analysis of data indicated by the charts, and results of the chart applications will be discussed in Chapter IV.

FOOTNOTES

¹ Operations Area One will adjudicate claims filed by applicants in cities bound by the Canadian border on the northern part of the State, the Pacific Ocean as a western border, the Cascade Mountains as the eastern border and Thurston, Lewis and Pacific counties on the south. Operations Area Two will adjudicate claims filed by applicants in all cities in the State of Washington east of the Cascade Mountains, and in Cowlitz, Clark and Wahkiakum counties in western Washington.

CHAPTER IV

RESULTS, ANALYSIS AND DISCUSSION OF THE DATA

Data collection proceeded as described in Chapter III. The selected theoretical approach, method of research, and results, analysis and discussion of the data will be presented in this Chapter.

Selected Theoretical Approach

A number of theoretical approaches were considered in analysis of the Disability Insurance Section. These were: (1) functional theoretical approach, (2) hypothetical deductive, (3) theoretical inductive, and (4) model. Of the four methods listed, the hypothetical deductive, the theoretical inductive and the model were not chosen because they emphasize conceptualization, logical deductive procedures and structural comparisons respectively, which were not appropriate for this investigation.

Functional Theoretical Approach

The functional theoretical approach was selected because explicit emphasis needed to be placed upon observation and data-oriented explanations. Functional theorists believe that the interaction of observational processes is necessary for scientific progress; therefore, the two processes should proceed simultaneously and should be given more or less equal emphasis.¹

Method of Research

Three methods of research were considered for selection in conducting the thesis investigation: (1) the descriptive method, (2) the statistical method, and (3) the experimental method. The experimental and statistical methods were not applied. These methods required study controls and more adequately defined problems which were not available for the investigation of the Disability Insurance Section. The Disability Insurance Section management problems required a type of analysis that could present data in a manner which would include discussion and application of new ideas and concepts.

Descriptive Method

The descriptive method of research was chosen for this study. The descriptive data were expressed qualitatively in verbal symbols and symbolic language. The qualitative data are the word descriptions of the work processes. Verbal data have been used extensively in comparative studies to describe objectives, philosophy and other factors.²

During the investigation of the Disability Insurance Section, a survey of the work flow was conducted in an effort to collect the detailed description of existing phenomena. This was done with the intent of employing the data to justify current conditions and practices or to implement plans for improving them. Three types of information were collected during analysis of the Section: (1) data concerning existing status, (2) comparisons of status and standards, and (3) means of improving status. The descriptive method of research involved the application of analytical management tools to the total work flow, emphasizing selected phases of the work flow. Then, through analysis of the data, work

dysfunctions were identified. The same analytical tools were then used to eliminate the work dysfunctions.

Summary of Data Analysis

The summary of data analysis will present problem areas as identified by the analytical management tools used in this study. The results of the analysis will also present the findings when analytical management tools are applied to eliminate work dysfunctions in the Disability Insurance Section.

Work Processing Variances

Analysis of the data presented by the Procedure Flow Chart indicated that in respect to operational areas one and two, a variance of procedures was a recurrent theme throughout the entire work flow. This variance of operations occurred even though the same formal procedural guidelines were existing for certain work flow processing points in both operational areas. The two operational areas are under the supervision of a single Section supervisor, and the two areas are operating in a single physical plant building complex. Three operational variances in particular will be discussed.

First Operational Variance. The first operational variance occurs during the initial intake processing in the operational areas. In the initial processing of the file by area clerical personnel, block 11 on the File Form 831 (an eight-part form which lists claimant data) (Figure 11) is checked for an indication of a concurrent file. The concurrent file occurs when the claimant applies for Supplemental Security Income and Social Security disability benefits programs simultaneously.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
SOCIAL SECURITY ADMINISTRATION

FORM APPROVED
BUDGET BUREAU 72R523.5

DISABILITY DETERMINATION AND TRANSMITTAL		1. FOLDER TO: BDI <input type="checkbox"/> SA <input type="checkbox"/> DIO <input type="checkbox"/>			7. DATE APPD.						
		4. SOCIAL SECURITY NUMBER									
3. W/E (If Auxiliary Filing) <input type="checkbox"/> RSI W/E <input type="checkbox"/> <input type="checkbox"/> DIB W/E <input type="checkbox"/>		6. DB		7. SEX M <input type="checkbox"/> F <input type="checkbox"/>		8. RACE W <input type="checkbox"/> N <input type="checkbox"/> O <input type="checkbox"/>		9. AOD		10. AT AGE	
5. NAME AND ADDRESS OF CLAIMANT						11. CLAIM FOR FREEZE <input type="checkbox"/> DIB <input type="checkbox"/> CHILD <input type="checkbox"/> DWB <input type="checkbox"/>		12. FAMILY STATUS MAR. <input type="checkbox"/> SG. <input type="checkbox"/> NO. CHILDREN (UNDER 18)		13. QC REQ. LAST MET <input type="checkbox"/> SI.	
14. <input type="checkbox"/> W/E DOES NOT MEET QC REQ. A. <input type="checkbox"/> DIS. BDI REVIEW B. <input type="checkbox"/> SINCE LAST DET.		15. PREV. DENIED OR TERM.		16. NON-DIS. DEV. IN PROGRESS		17. MED. DEV. DEF.		18. S A CODE		19. STATE	
20. DISTRICT OFFICE ADDRESS						DO CODE		RO CODE		23. REMARKS	
21. DO/BO REPRESENTATIVE						22. DATE OF TRANSMITTAL		23. TELEPHONE NO. 1		PRESCRIBED PERIOD: Beginning _____ Ending _____	
PURSUANT TO PROVISIONS OF SEC. 221 OF SOCIAL SECURITY ACT, IT IS DETERMINED THAT THE CLAIMANT:											
24. <input type="checkbox"/> HAS BEEN UNDER A DISAB. SINCE		25. <input type="checkbox"/> WAS UNDER A DISAB. A. DATE FROM _____ B. TO _____		26. <input type="checkbox"/> WAS NOT UNDER A DISAB. ON OR BEFORE (Date)		29. DIAGNOSIS		30. MOB CODE		31. VOCATIONAL BACKGROUND (Occupation)	
27. <input type="checkbox"/> WAS NOT UNDER A DISAB.		28. CASE OF BLINDNESS AS DEFINED IN SEC. 216(i) A. <input type="checkbox"/> NOT UNDER A DISAB. FOR CASH BENE. PURP. B. <input type="checkbox"/> UNDER A DISAB. FOR CASH BENE. PURP. SINCE		31. OCC. YEARS		31. EDUC. YEARS		32. BASIS FOR DETERMINATION		REG-BASIS CODE _____ LISTING _____	
<input type="checkbox"/> CONTINUED ON ATTACHED SHEET (Use SSA-834)											
33. REC. RE-EXAM <input type="checkbox"/> NONE <input type="checkbox"/> (Date) <input type="checkbox"/> HOSP.		34. DISABILITY EXAMINER SA		35. DATE		36. REVIEW PHYSICIAN SA		37. DATE		(RELEASE DATE OF FOLDER TO BDI/PC)	
38. <input type="checkbox"/> CHILD'S DISABILITY BEGAN BEFORE AGE 18 AND CONTINUES. <input type="checkbox"/> CHILD NOT UNDER A DISABILITY WHICH BEGAN BEFORE AGE 18.		39. <input type="checkbox"/> W/E MEETS QC REQ. IN _____ QTR. <input type="checkbox"/> W/E DOES NOT MEET QC REQ. HAS _____ OF _____ QTRS. FOR AQD ENDING _____		40. A PERIOD OF DISABILITY IS <input type="checkbox"/> ESTABLISHED FROM _____ TO _____ <input type="checkbox"/> NOT ESTABLISHED		41. REMARKS		<input type="checkbox"/> VR REFERRAL <input type="checkbox"/> PREV. REF.			
42. RE EXAM REQ		43. DISABILITY EXAMINER		44. DATE		45. DISABILITY EXAMINER		46. DATE			
47. <input type="checkbox"/> RN <input type="checkbox"/> PL		48. IR/PAR NO		49. PRIOR ACT <input type="checkbox"/> PD <input type="checkbox"/> PI <input type="checkbox"/> REVISED		50. BASIS CODE		51. A ORD CODE		52. RETURN CODE	
						53. CAT. <input type="checkbox"/> W <input type="checkbox"/> DIB <input type="checkbox"/> OSF <input type="checkbox"/> CH <input type="checkbox"/> FR		54. SPECIAL CODE <input type="checkbox"/> VA <input type="checkbox"/> VAD		55. LIST NO.	

Figure 11. Disability Transmittal Form 831

When a check of block 11 on the File Form 831 indicates a concurrent file and there is only one File Form 831 in the file or only one file, a special procedure must be followed.

In operational area one, a clerk takes the file to the xerox machine and will xerox the File Form 831. The file and the xeroxed copy are then taken to the area supervisor. The area supervisor will call the district social security office where the claimant applied and clarify the File Form 831 indication of a concurrent application. In operational area two when there is an indication on the File Form 831 that a file is concurrent, but only one File Form 831 is in the file, a clerk will carry the file to a unit supervisor. The supervisor will call the district office where the claimant applied and clarify the File Form 831 indication of a concurrent application. The xerox copy of the File Form 831 is then mailed to the district social security office for their records (Figure 12).

Second Operational Variance. The second variance of operation occurs during the file intake processing in the areas. When the file arrives in the mail room, mail clerks check the File Form 831 for an indication of a prior file. When the file is sent to the operations area, the file is again checked for an indication of a prior file. In operations area two, if there is not an indication of a prior file on the File Form 831, then the file is processed in normal routing procedures (Figure 13).

In operations area one, if there is no indication of a prior file on the File Form 831 but other evidence in the file indicates a prior file, the intake clerk will return and recheck the card files. If a prior card is located and it is not the same program designation as the new file, the

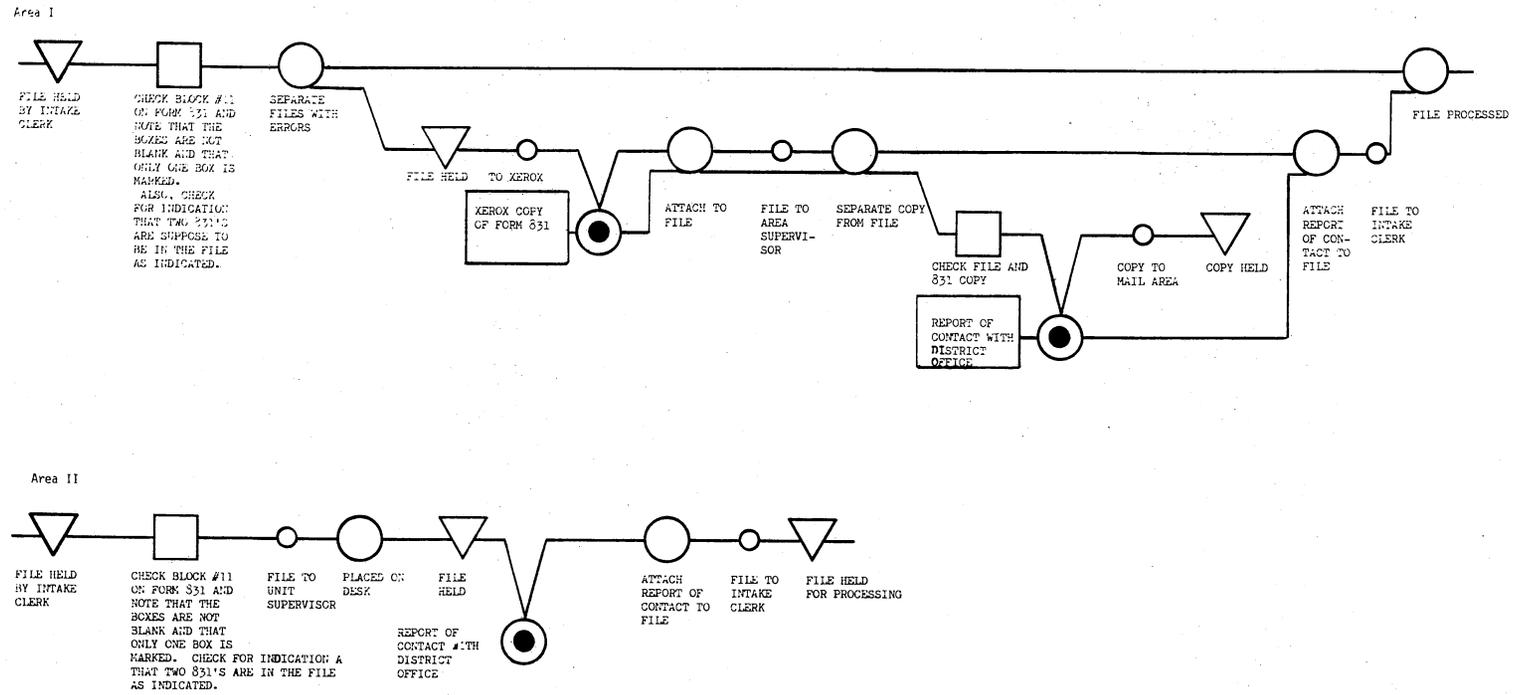


Figure 12. Concurrent File Process Dysfunction

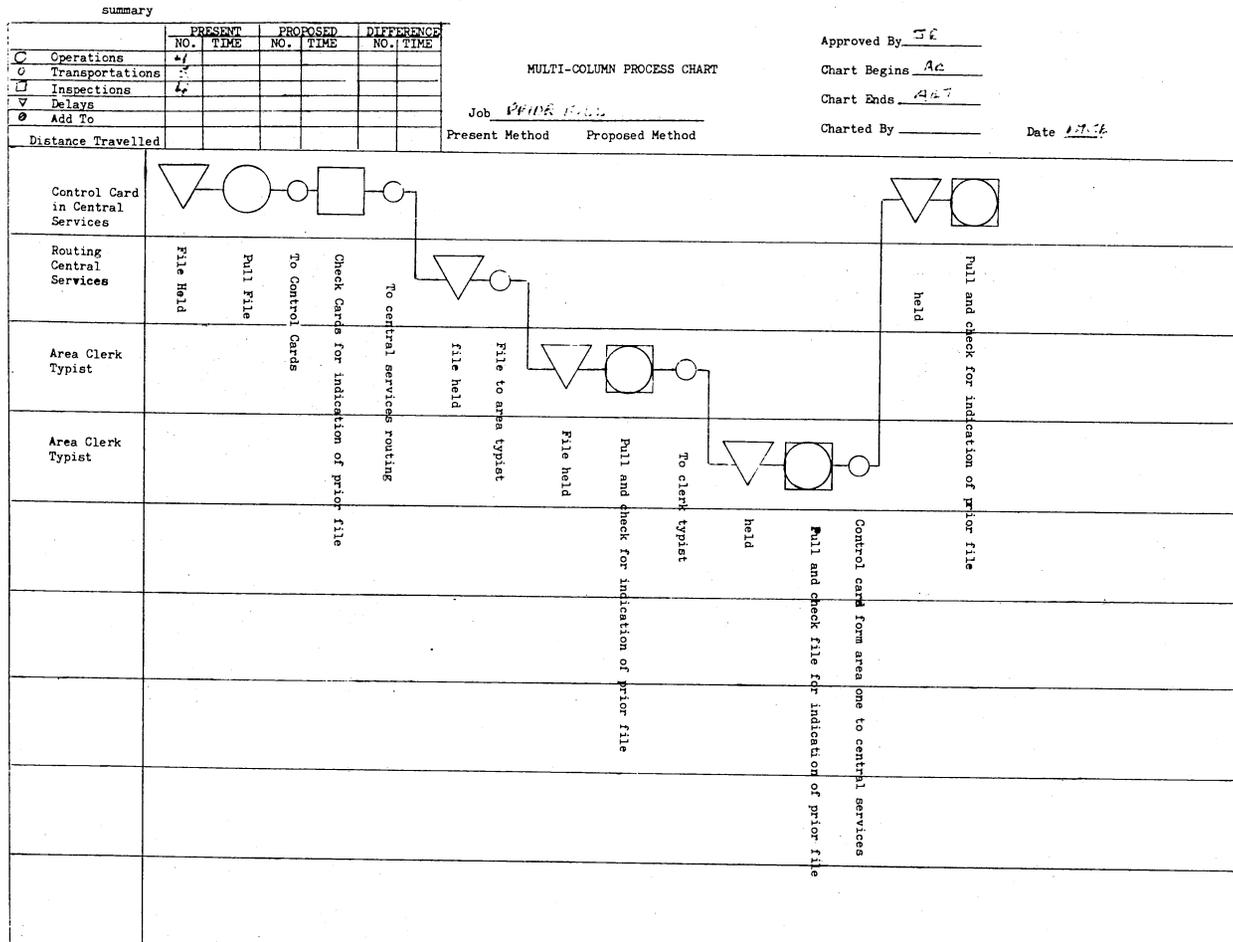


Figure 13. Prior File Check Dysfunction

prior card and file remains are xeroxed. The new card, file remains, and prior card are placed with the file and taken to the operations area for processing. If the prior card is the same program designation as the new file, the prior card and file remains are pulled. The card and file remains are placed with the file and taken to the proper operations area for further processing.

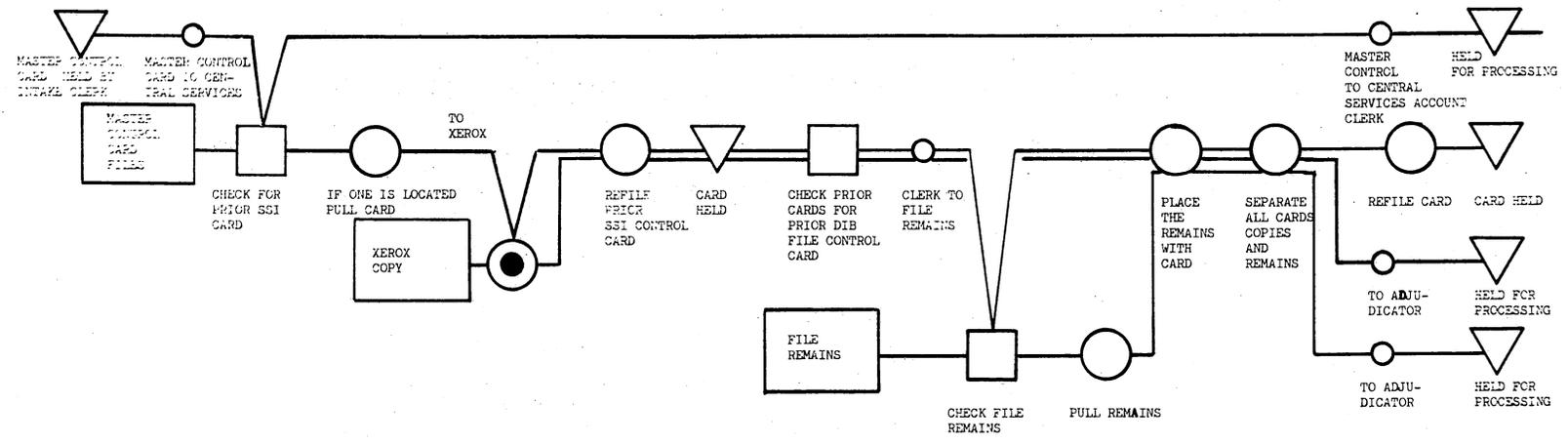
Third Operational Variance. The third operational variance occurs during the processing of new master control cards. After control cards have been typed on the newly received file and operations area intake count processes are completed, the control cards are taken to the central services area for card control processing. Operations area two personnel take the card directly to the card control clerks in the central services area and the card count clerks complete processing of the new master control cards.

In operations area one, a clerk takes the control cards to the central services inactive control card files and checks the new cards against the inactive control cards for an indication of a prior card. If the prior card is of a different program designation than the new card, the prior card and prior file remains are pulled, then xeroxed and returned to the files. The xeroxed material is attached to the new card and returned to the proper area for further processing. If the prior card is of the same program designation as the new card, the prior card and file remains are pulled, attached to the new master control card and returned to the operational area for further processing (Figure 14).

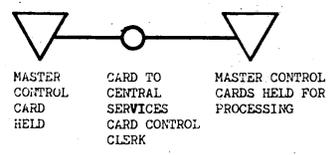
Duplication of Review

Analysis of the Procedure Flow Charts revealed duplication of

AREA I



AREA II



Charted by
 Jerry Guhl
 Disability
 Insurance
 Section
 Olympia,
 Washington
 5/75

Figure 14. Master Control Card Dysfunction

checking procedures throughout the work flow.

Duplication of Block 15 Review. Duplication was particularly prevalent in the checking procedures involved in the review of block 15 on the File Form 831 for indication of a prior file. When a file is received by mail clerks, block 15 on the File Form 831 is checked for an indication of a prior file. The file is then sent to the operational areas for processing where the file is again checked for an indication of a prior file by an operations area clerk typist. When the file is sent to another operations area clerk typist for the typing of control cards, the file is again checked for an indication of a prior file. After the control card is typed in operations area one and all processing is completed on the control card in the operations area, the card is used to further check for inactive cards for an indication of a prior file (Figure 15).

Technical Review/Quality Assurance Duplication. Further duplicate action was occurring in the area of technical review and quality assurance review. The function of technical review is the review of all files for an indication of clerical or adjudicator technical errors. The function of quality assurance review is the review of a random sample of files for an indication of errors which are in the area of medical development of the file. Quality assurance will also review the file for an indication of technical errors. Because the quality assurance review occurs in the central services area after the files have left operations area one and two, there is a duplication of review as the technical review occurs while the file is in the operational areas one and two (Figure 16).

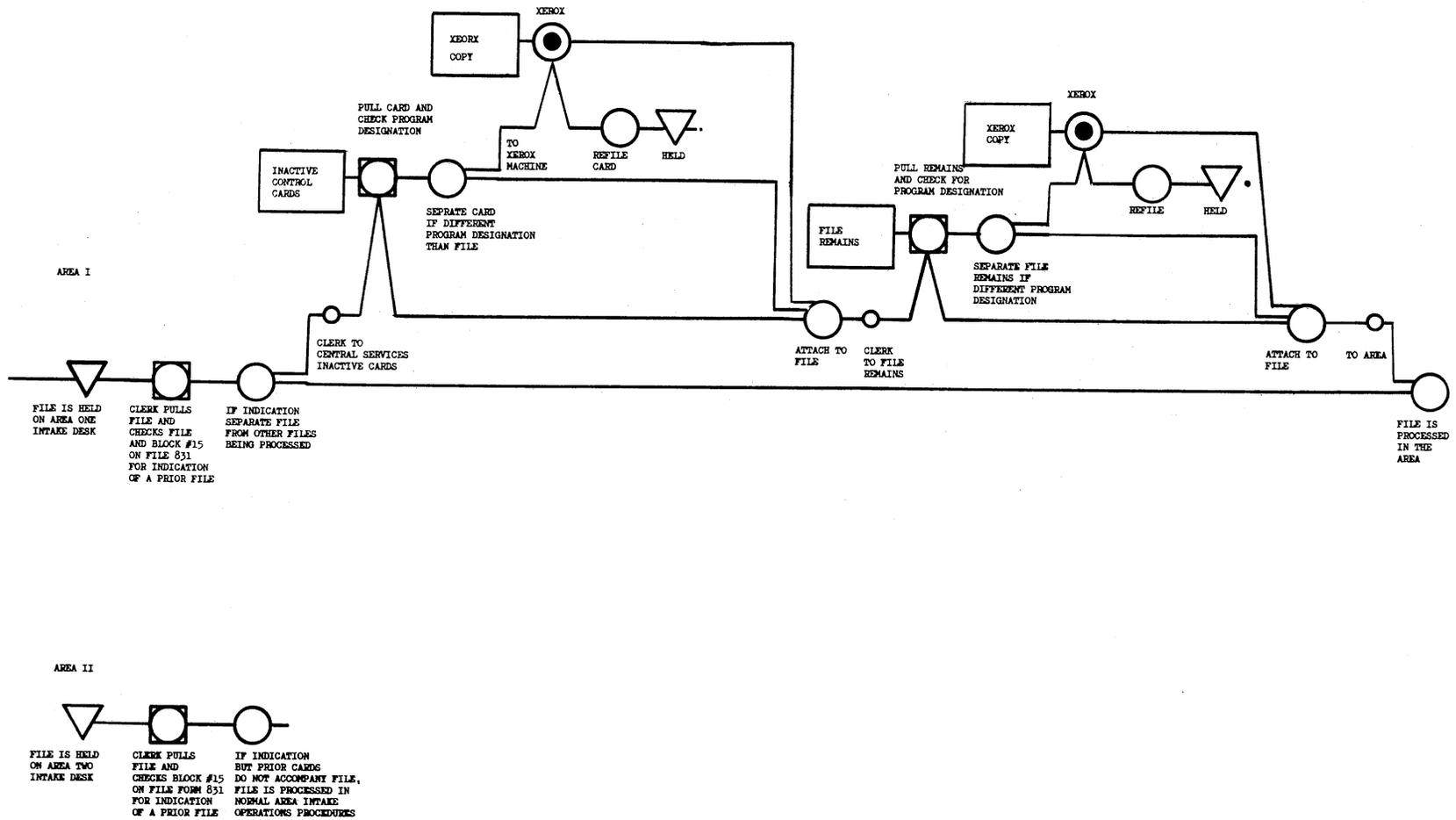


Figure 15. Duplication of Block 15 Review

	Present		Proposed		Difference	
	No.	Time	No.	Time	No.	Time
TRANSPORTATIONS	3					
INSPECTIONS	2					
DELAYS	4					
ADD TO OPERATIONS						
DISTANCE TRAVELLED						

Job **QUALITY ASSURANCE/TECHNICAL REVIEW**
 Present Method Proposed Method

Approved By JDG
 Chart Begins QA
 Chart Ends ASSEMBLY
 Charted By JDG DATE: 3/8/75

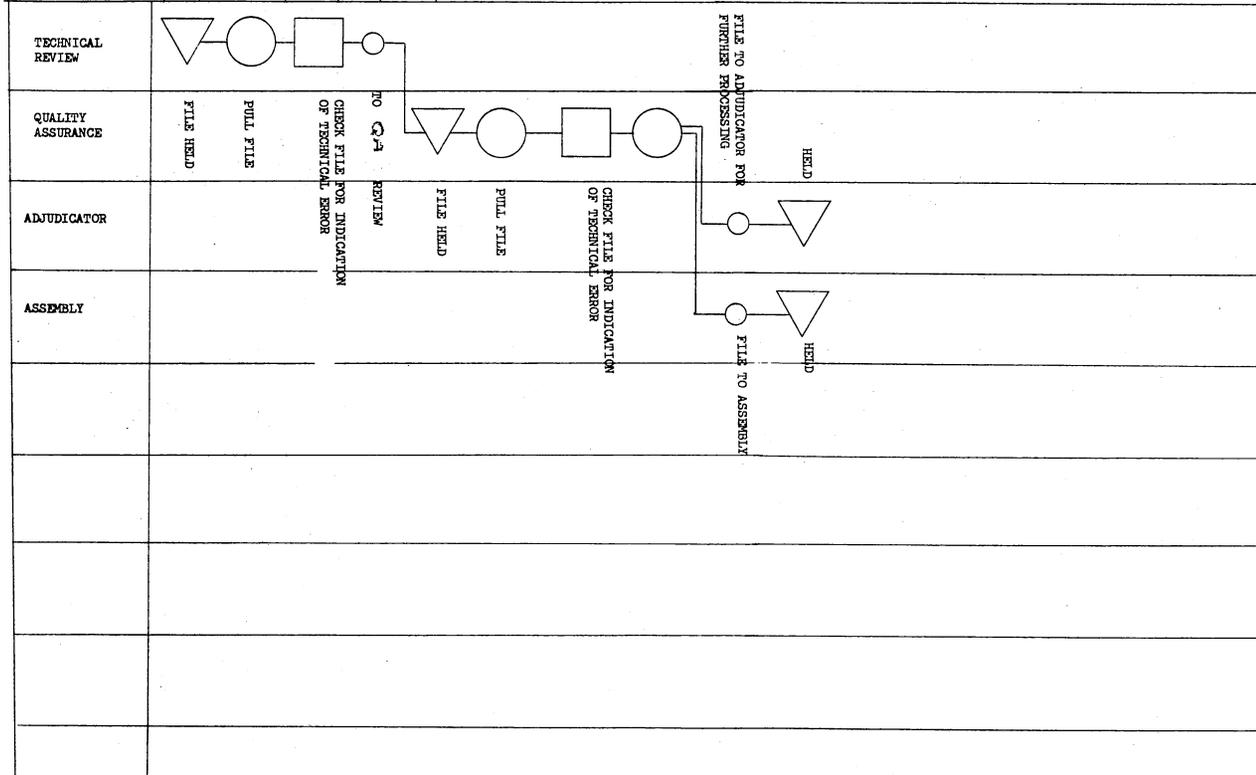


Figure 16. Quality Assurance/ Technical Review Dysfunction

Layout Design Dysfunctions

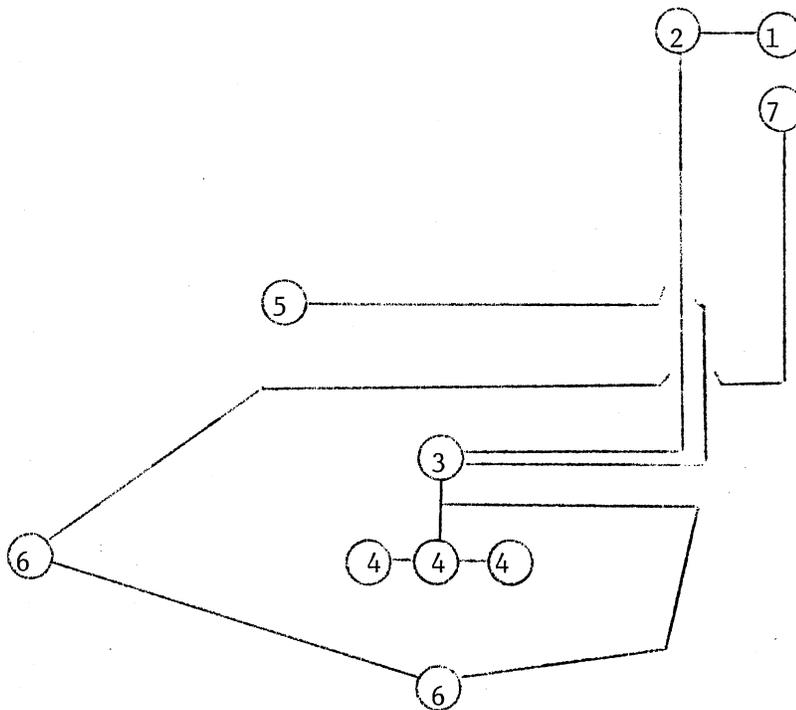
Analysis of the Work Flow Diagram Charts, which illustrate the physical movement of personnel and material, revealed that extensive movement of personnel and paper work was occurring in a non-productive manner. The excessive movement of personnel was particularly analyzed in the central services area. Visual observation and analysis of Work Flow Diagram Charts revealed crowded working conditions, excessive backtracking of work functions, cross travel of work paths and excessive movement of personnel who shared similar work responsibilities. Two processing operations in the central services area, assembly and mail, will be discussed.

A description of assembly and mail processing functions is as follows:

- (1) The file assembly area: The file assembly area is concerned with the preparation of a file for movement to various payment centers, social security central offices and district offices.
- (2) The mail intake area: The mail intake area processing involves the date stamping of incoming mail and files, identifying incoming mail and files, routing of files and mail and the processing of outgoing mail.

The Work Flow Diagram Charts revealed that mail personnel covered 260 feet per individual per file in completing the task involved with processing a file during initial file intake (Figure 17). The personnel involved with file assembly covered an average of 485 feet per individual per file during file assembly (Figure 18).

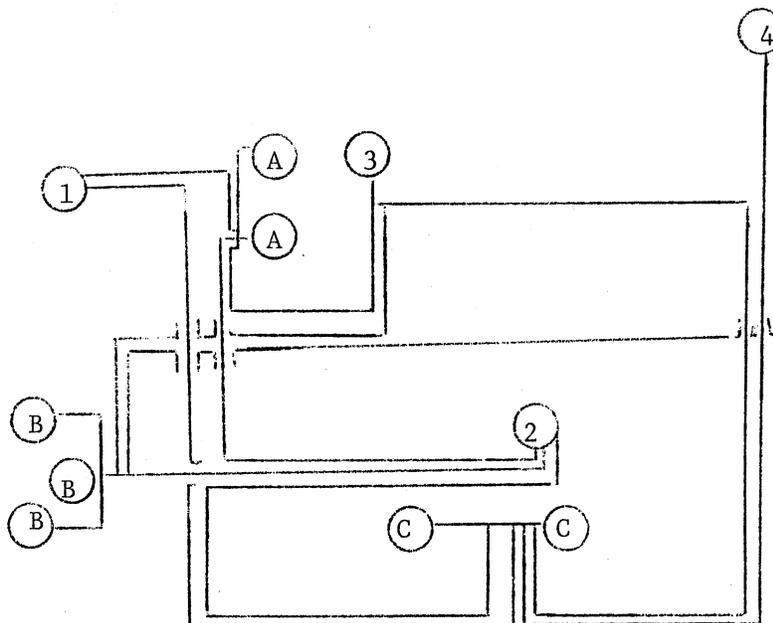
Because the assembly and mail functions were diffused and apart from the general work areas (mail personnel's work area being away from the



1. File on mail intake table.
2. Date stamp file received.
3. File to active control cards for card check.
4. File to inactive control cards for card check.
5. Xerox card if necessary.
6. To file remains for prior file remains check.
7. To area routing boxes with file.

Total average movement per file - 260 feet

Figure 17. Mail Work Flow Dysfunctions



1. File on Vocational Rehabilitation desk (1) for review.
2. Assembly clerks A to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
Assembly clerks B to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
Assembly clerks C to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
3. Assembly clerks A to active control cards (2), pull cards and return to desk.
Assembly clerks B to active control cards (2), pull cards and return to desk.
Assembly clerks C to active control cards (2), pull cards and return to desk.
4. Assembly clerks A to xerox machine (3), xerox material in file.
Assembly clerks B to xerox machine (3), xerox material in file.
Assembly clerks C to xerox machine (3), xerox material in file.
5. Assembly clerks A to out-processing table (4), where files are placed and held for later action.
Assembly clerks B to out-processing table (4), where files are placed and held for later action.
Assembly clerks C to out-processing table (4), where files are placed and held for later action.

Figure 18. Assembly Work Flow Dysfunction

control cards which they check files and mail against, and assembly, a unit which had personnel sitting in various rooms apart from each other) the Work Flow Diagram Charts indicated that these two operating functions were involved in excessive movement of personnel and paper work.

Discussion of the Primary Hypothesis and Five Problem Areas

Primary Hypothesis

The primary hypothesis is stated as follows: Selected management tools could be applied to the Disability Insurance Section as a means of confirming the existence of five suspected management problem areas. The selected management tools were used in identification of the five problem areas.

First Problem Statement of Analysis

Certain procedures and processing activities concerned with the movement of files and paper work appear to be dysfunctional to Section operations. By application and analysis of information indicated by analytical management tools, a conclusion was reached that dysfunctional processing and procedures were occurring in the Disability Insurance Section.

Duplicate Checking of File Form 831. The analysis of the Procedure Flow Charts and Multi-Column Process Charts indicated that dysfunctional actions were first occurring during mail and initial intake processing of the file on its arrival from social security district offices. The initial dysfunctional procedure involves the duplicate checking of the

File Form 831 for an indication of an active or prior file on a claimant. The charts indicated that when the file arrived in the mail area, certain blocks on the File Form 831 were checked for indication of an active or prior file on the particular claimant. When all checking and intake processing was completed in the mail area, the file was forwarded to the respective operations area. In the operations areas during the initial intake processing of the file, the File Form 831 was again checked for an indication of a prior file or active file. After the initial intake processing, the file was sent to another clerk typist. The clerk typist would again check the file for an indication of a prior file or active file before typing new control cards.

A further step in checking for a prior or active file involved only one of the operational areas. The procedure involved a clerical person returning to the central services area with control cards which had been typed by clerical personnel during the intake process. Although the file had been previously checked four times for an indication of a prior file or active file on the claimant, the new master control cards were checked against active and inactive cards in the central services area for an indication of a prior card or active card (Figure 19).

Dysfunctional Routing Procedures. A second area of dysfunctional processing and procedures involving personnel was the routing of the file to final destination, technical review of the file for technical errors and quality assurance review of a random sample of files for technical and medical development errors. The routing process involves the attaching of a routing slip to a file for movement of that file to a social security district office, social security administration regional office, or to the Bureau of Disability Insurance, Baltimore, Maryland (Figure 20).

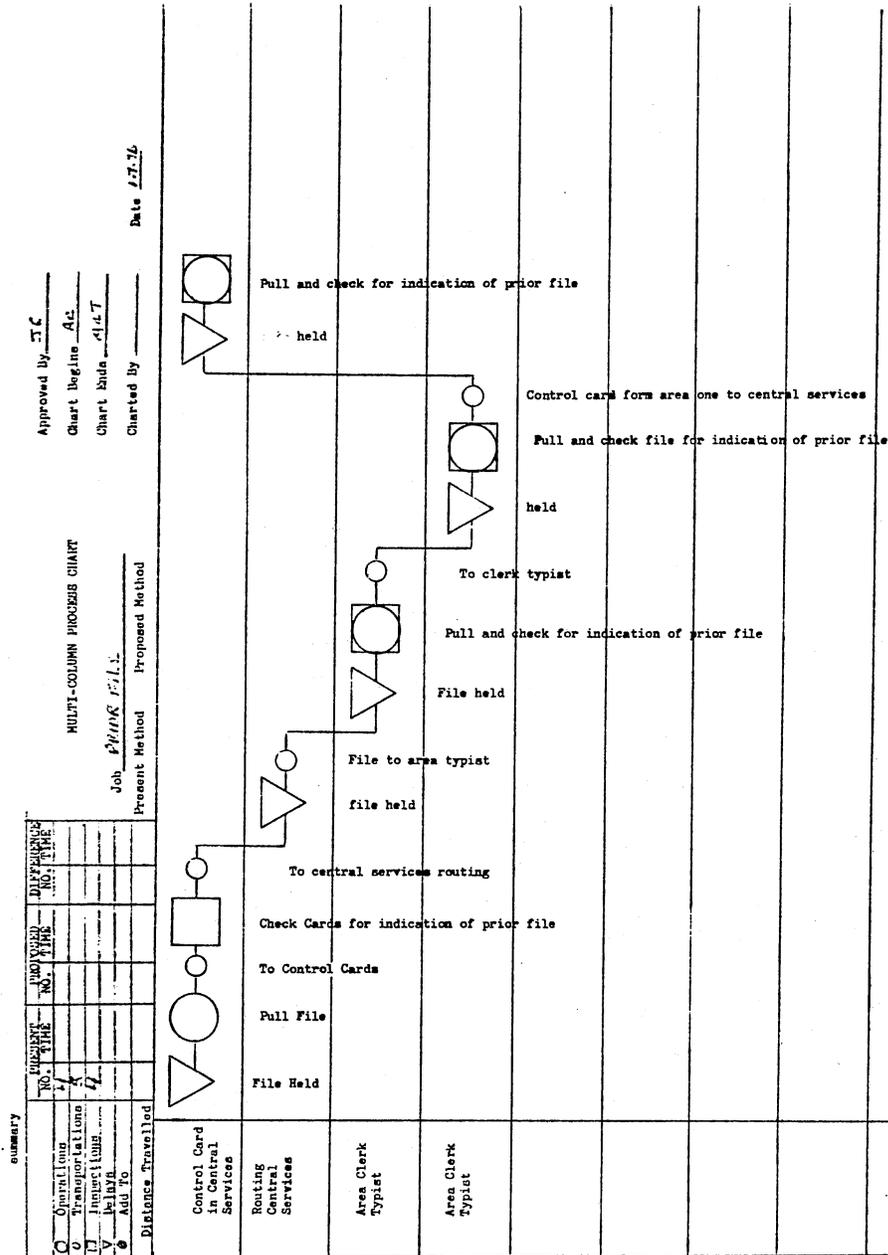


Figure 19. Duplicate Prior Card Check

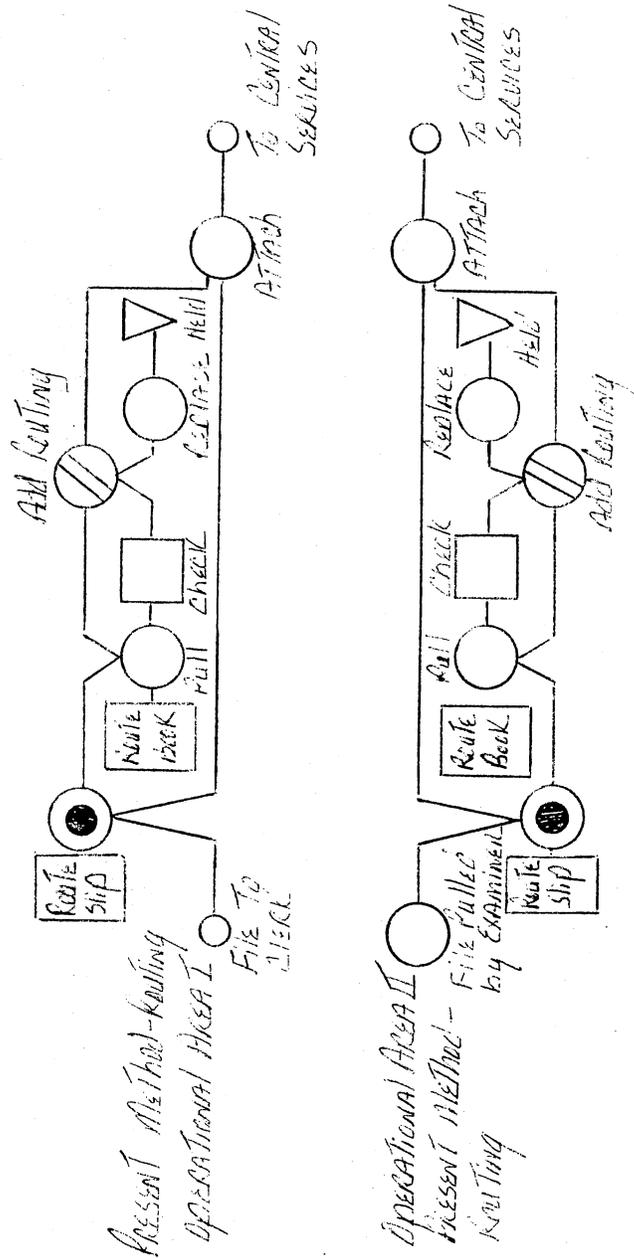


Figure 20. File Routing Dysfunction

In operations area one, a clerk will route the file to its proper destination. In operations area two, the routing is completed by each adjudicator.

The Procedure Flow Charts indicated that the adjudicators did not always know where the file was to be routed. The charts revealed that misrouted files had to be processed for proper routing identification at the technical review point. The Procedure Flow Charts indicated that information concerning routing procedures was not adequately disseminated to the entire adjudicative staff in operations area two. The Multi-Column Process Chart indicated that often during the technical review processing of the file, the clerk regularly must change the file routing slip because of incorrect routing procedures in the operational areas; thus, the file is delayed.

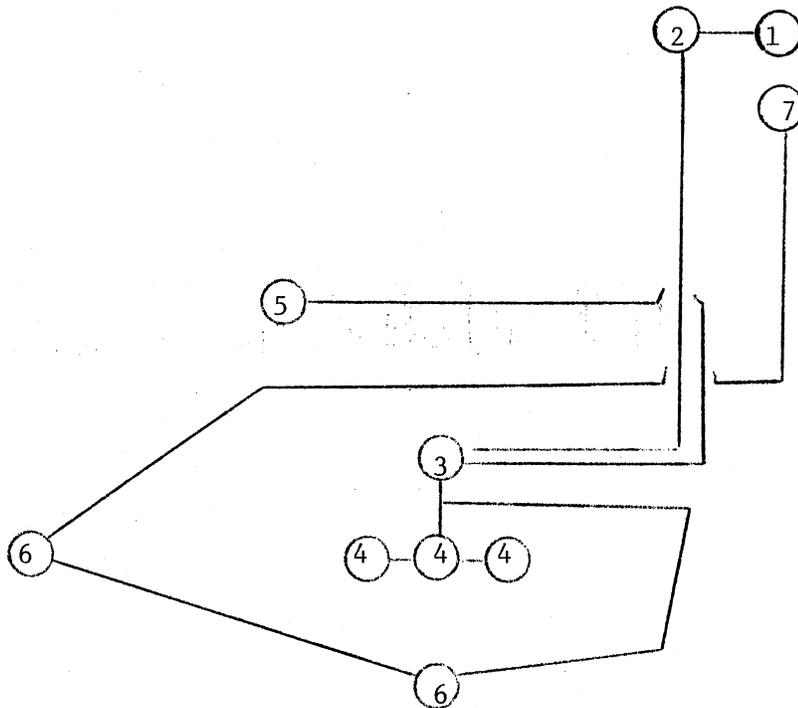
The technical review and quality assurance review teams present yet another area of dysfunctional processing and procedural operation in the Section. The Procedure Flow Chart revealed that a duplication of file review was occurring between the technical review and quality assurance teams. The function of the technical review team is to review each File Form 831 for indication of technical errors. The quality assurance team will review a random sample of files for an indication of technical errors and for errors in the area of medical development. The Procedure Flow Charts and Multi-Column Process Charts indicated that a dysfunctional operation was occurring in the duplicated process of reviewing the file for indication of technical errors. The duplicate review of the file for technical errors by quality assurance and technical review delays the file and is costly in terms of personnel expense.

Mail and Assembly Processing Dysfunctions. Another area in which certain procedures and processing activities completed by staff personnel are dysfunctional to the operations of the Disability Insurance Section is in the area of work flow patterns and the physical layout of work areas in the central services area. Two processing operations in the central services, assembly and mail, will be discussed. A description of assembly and mail processing has been previously described on page 58 of the thesis.

The Work Flow Diagram Charts revealed that mail personnel were involved with excessive movement in the initial intake processing of the file. The charts revealed that mail personnel covered 260 feet per individual in completing the task of processing a file during initial mail intake processing (Figure 21). Personnel in assembly processing interrupted the work flow which was dysfunctional to efficient work processing (Figure 22). Because individuals who were involved with the same task in the assembly unit were sitting in separate offices, communication problems, inefficient movement of personnel and congested work areas developed. The personnel involved with file assembly covered an average of 485 feet per individual per file batch in completing the task of processing a file during file assembly.

Second Problem Statement of Analysis

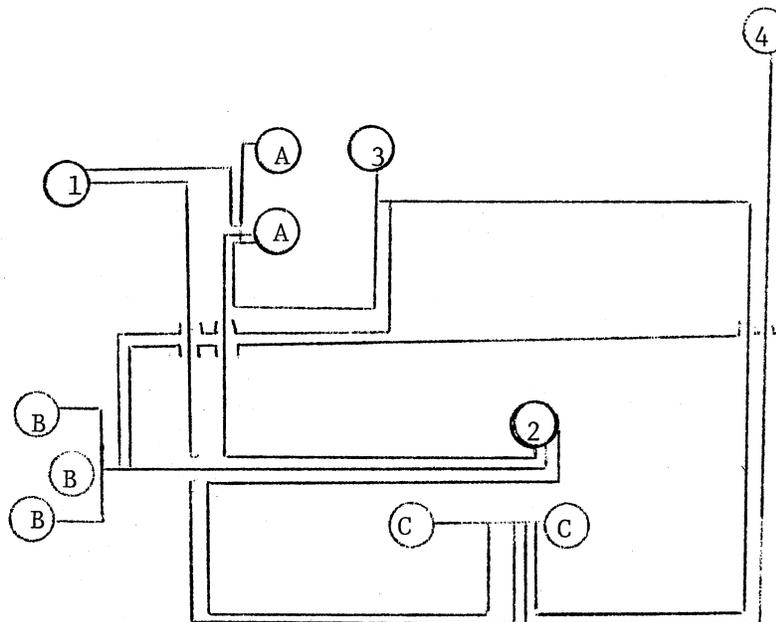
Procedural directives from the Section Head appear to not be clearly disseminated to total staff. Analysis of the management tools revealed that dysfunctional communication procedures were existing in the Section. Scott notes that in general, communication difficulties arise from one or a combination of the following factors: (1) the nature and function of language, (2) deliberate misrepresentation, (3) organization size and



1. File on mail intake table.
2. Date stamp file received.
3. File to active control cards for card check.
4. File to inactive control cards for card check.
5. Xerox card if necessary.
6. To file remains for prior file remains check.
7. To area routing boxes with file.

Total average movement per file - 260 feet

Figure 21. Mail Work Flow Dysfunctions



1. File on Vocational Rehabilitation desk (1) for review.
2. Assembly clerks A to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
 Assembly clerks B to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
 Assembly clerks C to Vocational Rehabilitation desk (1), pull files for assembly and return to desk.
3. Assembly clerks A to active control cards (2), pull cards and return to desk.
 Assembly clerks B to active control cards (2), pull cards and return to desk.
 Assembly clerks C to active control cards (2), pull cards and return to desk.
4. Assembly clerks A to xerox machine (3), xerox material in file.
 Assembly clerks B to xerox machine (3), xerox material in file.
 Assembly clerks C to xerox machine (3), xerox material in file.
5. Assembly clerks A to out-processing table (4), where files are placed and held for later action.
 Assembly clerks B to out-processing table (4), where files are placed and held for later action.
 Assembly clerks C to out-processing table (4), where files are placed and held for later action.

Figure 22. Assembly Work Flow Dysfunction

complexity, and (4) lack of acceptance.³ The communication dysfunctions which affect the Section are a combination of Scott's four factors. A definite indication of communication dysfunction was introduced by analysis of the Procedure Flow Charts. The charts revealed the previously discussed variance of operations between operational areas one and two. Analysis of the flow charts indicated that a procedure would be communicated from the third line supervisory level to the second and first line supervisors. The charts revealed that in many situations, the procedure was never communicated properly from the second line supervisor to the first line supervisor. A review of one particular variance of operation between operations areas one and two will define the communication dysfunction confronting administrators of the Section. The variance of operations involves the checking of block 11 on the File Form 831 for indication of a concurrent file. The concurrent file situation occurs when the claimant applies for Social Security and Supplement Security Income benefits simultaneously. When a check of block 11 on the File Form 831 indicates a concurrent file and there is only one File Form 831 or there is only one file, a special procedure should be followed.

In operational area one, the procedure was for the file to be taken to the operational area supervisor. The supervisor would call the social security district office where the claimant applied and request confirmation that the file was concurrent. A xeroxed copy of the File Form 831 was then forwarded to the district office with the error marked on the File Form 831 indicating the problem with the file.

In operational area two, when the concurrent file problem occurred, the file was taken to a unit supervisor who would call the district social security office where the claimant applied and request a confirmation

that the file was concurrent. A xeroxed copy of the File Form 831 was not forwarded to the district social security office with the error indication.

The variance of operations between operations areas one and two in the processing of the concurrent case error situation is a direct indicator of Section communication dysfunctions. This is because a verbal procedure from the Section Head was given to area supervisors stating how the concurrent File Form 831 problem was to be processed. As revealed by the Procedure Flow Charts, the case was processed in accordance with the correct procedure in area one but not area two.

A second operational variance was occurring during intake review of the File Form 831 for indication of a prior file which was revealed by the Procedure Flow Chart. In operations area one, if there is an indication of a prior file on the File Form 831, or if information in the file indicates a prior file, but file remains or a prior card does not accompany the file, then the intake clerk will return to the central services area and recheck the active or inactive control cards for further indication of a prior file. This action was conducted against a directive the Section Head gave in May of 1974.

In operations area two, if there is an indication of a prior file on the File Form 831 or other evidence in the file indicates a prior file, but file remains or a prior card does not accompany the file, then the file is processed through regular intake procedures.

The dysfunctional aspects of the previously discussed operational variance are twofold:

- (1) There is a delay in the case processing time because the intake clerk has to return to the central services area and

recheck the control cards.

- (2) When an indication of a prior file is revealed, then prior file remains should accompany the incoming file. The file remains could be valuable in giving information to the adjudicator concerning claimant allegations.

Third Problem Statement of Analysis

Based on observation of Section operations, it appears that no centralized authority is in control of the functions of the Disability Insurance Section. A review of the Procedure Flow Charts and Multi-Column Process Charts revealed that the quality assurance work flow did not follow a particular line of hierarchy when cases had to be returned to the operations area for further development or corrections. Procedures for return of a case in which quality assurance had noted a medical development error in a file, involved returning the file to the operations area supervisor. The area supervisor would review the error indication and forward the file to the unit supervisor for appropriate action. The unit supervisor would then forward the file to the disability lay examiner for corrective action.

The actual return flow was for either the operations area supervisor or unit supervisor to correct the file error and not forward the file to the lay examiner. The lay examiner would not see the file or the error that was made. This process denied the lay examiner a learning experience in which errors could be noted and corrected. Supervisors were reluctant to return files to lay examiners because the examiner might retain the file for an extended period of time causing a decline in a particular unit case production count. Therefore, to keep production counts up,

case errors were corrected at a higher level and the examiner never benefited from correcting errors which will occur again and again in the process. The problem with the return of a case from quality assurance and the previously described problem with the variance of operations in processing a concurrent case are problems indicative of poorly-defined lines of authority and hierarchy definition.

Fourth Problem Statement of Analysis

It appears that written procedures describing the processing of claims by Section lay examiners and clerical staff do not exist. As was indicated with the return of a case from quality assurance with the indication of a technical or medical development error, a clear line of policy and procedural guidelines was not evident. A policy of who would have case correction authority at the various management levels of supervision could not be located in Section policy manuals. Procedure Flow Charts also revealed that in the quality assurance return file flow, a definite procedure of file return was not established.

The variance of operations between the operational areas in the routing of the file to its final destination is one indication of lack of procedural guidelines. In operations area one the procedure was for a clerical employee to add the routing slip to the file indicating the final destination of the file. Federal procedures exist which route files to a particular final destination. However, Section management does not prescribe procedures or policy regarding the routing function that will be completed in the Section.

The Procedure Flow Charts indicated that often when a problem occurs with a decision on a file regarding allowance or denial, an arbitrator

must be called into the case decision process. Analysis of a sample of Procedure Data Charts completed by Section staff revealed that the file was to be returned to the Section's chief medical consultant for review. Another review of Procedure Flow Charts completed by Section staff indicated that the file could be sent to the Section supervisor in cases involving the need of an arbitrator. The charts indicated that there was a lack of policy and procedures which would determine how cases would be processed for arbitration and who would be the final arbitrator.

Each instance of variance revealed by the charts of operations between operational areas one and two is an excellent indication of unclear policy and procedural guidelines. File processing being completed in a separate manner by each of the operation areas demonstrates that file processing actions were being completed daily in a manner which was dysfunctional to Section operations.

Fifth Problem Statement of Analysis

Based on observations of Section operations, it appears that redundant actions are occurring in the work flow of the Disability Insurance Section and that a system to report the areas of repetitive errors and duplicate work processing is non-existent.

Analysis of the Procedure Flow Charts indicated that a sufficient means of case control was available for counting cases which were incoming and outgoing from the Section. However, analysis revealed that severe inadequacies were existing in other areas of management control measures.

Technical Review and Quality Assurance Review

Most deficient in management control measures were the areas of

technical review and quality assurance review. During the process of technical review of each file, a data sheet is completed listing specific claimant information. Errors which were made during the decision-making process are listed on the data sheet and a separate sheet of paper. If an error occurred, the separate sheet is attached to the file and the data sheet is placed in a separate stack. The file is returned to the examiner for error correction. The data sheet is held. After the file errors have been corrected, the data sheet is pulled and destroyed (Figure 23). The error data sheet is never applied to a system of management control measurement for the process of eliminating errors.

Analysis of the Procedure Flow Charts indicated that the quality assurance review sheets were processed in the same manner as the technical review data sheets. The quality assurance review error data sheets are used to inform the adjudicator of errors and the sheets are also used to fill out federal program reports. However, the error data sheets are not used in a system of management control measurement.

Discussion of the Secondary Hypothesis and Five Problem Areas

Secondary Hypothesis

The secondary hypothesis is stated as follows: Selected management tools could be applied to the Disability Insurance Section as a means of eliminating the confirmed management problems confronting administrators of the Disability Insurance Section.

First Problem Statement of Analysis

Certain procedures and processing activities concerned with the

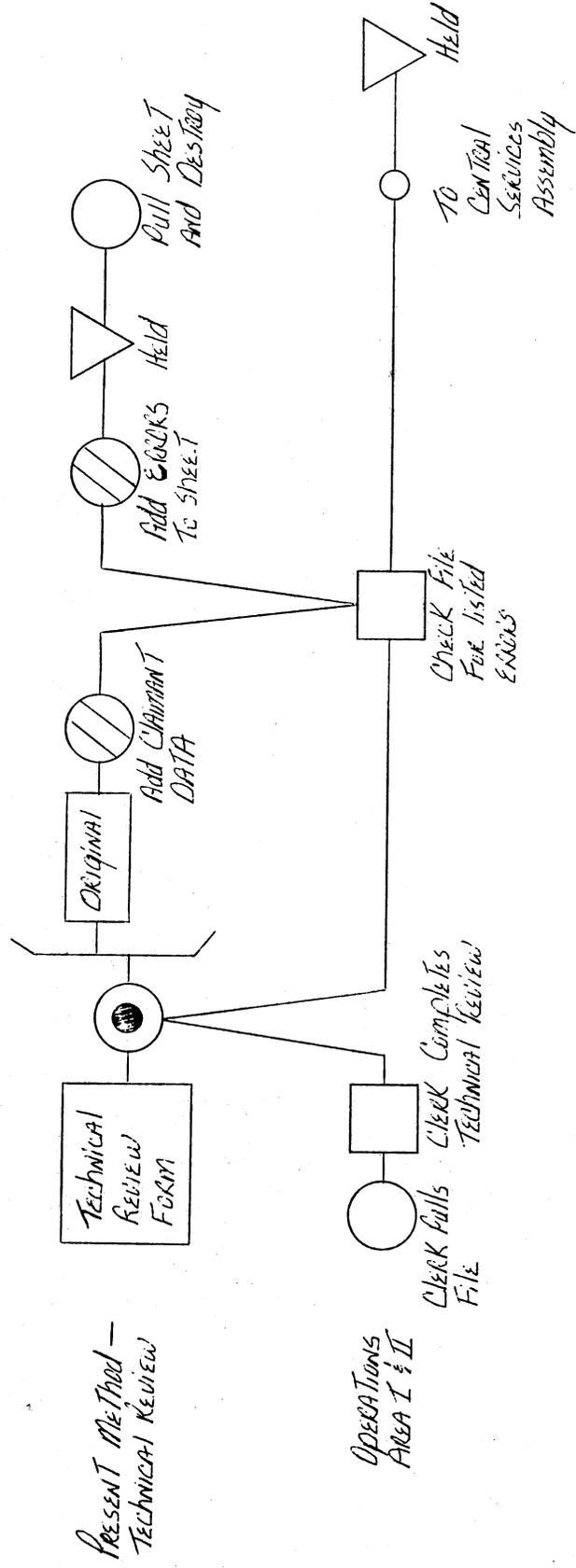


Figure 23. Error Reporting System Dysfunction

movement of files and paper work appear to be dysfunctional to Section operations. Through analysis of data presented by the analytical management tools, a conclusion was reached that dysfunctional processing and procedures were occurring in the Disability Insurance Section and could be eliminated. Analysis of data presented by the Procedure Flow Charts and Multi-Column Process Charts indicated that duplicate checking of the file and File Form 831 for an indication of an active or prior file was occurring in the central mail and in the operational areas' file intake processing. Secondly, analysis of the charts also indicated that a variance of procedures was occurring between the two operations areas in respect to intake review of the file and File Form 831 for an indication of an active or prior file.

Eliminating Duplication of Checking Procedures. By application of the Procedure Data Charts and the Procedure Flow Charts, a system of file checking was designed which would eliminate the duplicate checking procedures which were occurring throughout the Section. The work flow was designed in a manner that would enable clerical personnel to complete an efficient step-by-step check of the incoming file against the active and inactive control cards which are on file in the Section. The newly designed checking system would apply to all incoming files and would eliminate the need for additional checking in the operational areas. The variance of procedures in the operational areas and the duplication of procedure between the two areas would also be eliminated.

Eliminating Routing Dysfunctions. A further dysfunctional process revealed by the Procedure Flow Charts was the problem of attaching the routing slip for movement of the file to a final destination by clerks in

operations area one and by adjudicators in operations area two. Through analysis of data presented by the Procedure Flow Charts, an indication of the most efficient work flow concerning file routing can be determined. In an effort to insure the least level of erroneous routing and to eliminate extra procedures for the adjudicator, all routing should be completed by a clerical employee in the central services area (Figure 24).

Eliminating Review Dysfunctions. The analysis of the charts indicated that a duplicate review of the file was occurring between technical review and quality assurance. The technical review team reviews each file for an indication of technical errors while the quality assurance team reviews a random sample of files for technical and medical development errors. Through analysis of the quality assurance and technical review work flow when applied to the Procedure Flow Charts, it was recommended that the technical review teams be eliminated from the operations areas and combined with the quality assurance review team. The technical review team could then more easily pull cases for random sampling because the quality assurance review would be facilitated and communication between the two teams would be improved.

Eliminating Assembly/Mail Processing Dysfunctions. The Work Flow Diagram Charts revealed excessive movement of personnel and paper work in the assembly and mail work areas located in the central services unit. Excessive movement of paper work and personnel, poor communication between personnel involved with the same work task, and work area bottlenecks were the results. Analysis of the Work Flow Diagram Charts indicated that movement of the mail and assembly work areas to a new physical location in the central services unit would be beneficial to Section

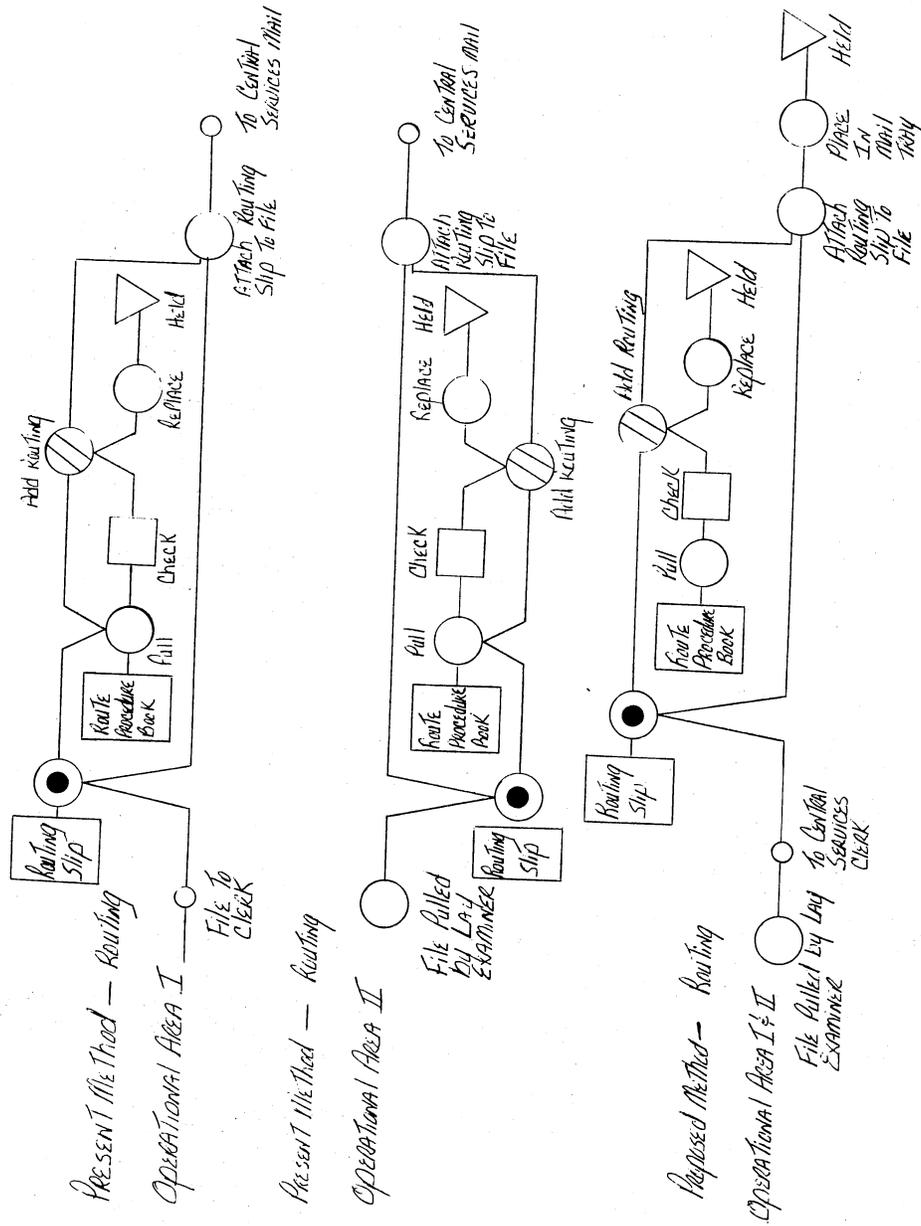


Figure 24. Proposed File Routing Diagram

operations.

All personnel who have work functions directly related to assembly were located in one location. File control, control card retrieval, and xeroxing of file material were assigned to one employee, eliminating the movement of all assembly personnel in the completion of these singular tasks. The total feet of movement of assembly personnel when processing a file and paper work related to the file was reduced to 170 feet per individual per file batch (Figure 25). Mail personnel were relocated to the area in which the major portion of their work responsibilities was accomplished. The movement of mail personnel during processing of incoming mail and files was reduced to 120 feet per individual per file batch (Figure 26).

Through the application of cost/benefit analysis, significant savings were realized which indicated that changes in the present work flow would render positive results. The application of Ben S. Graham's cost/benefit formula resulted in the following findings:

Present Mail Area.

$$(1) \quad 5 \text{ min.} \times 40,000 \text{ claims} = \frac{200,000}{60} = 3333.33 \times \$3.40 = \$11,332/\text{yr.}$$

Proposed Mail Area.

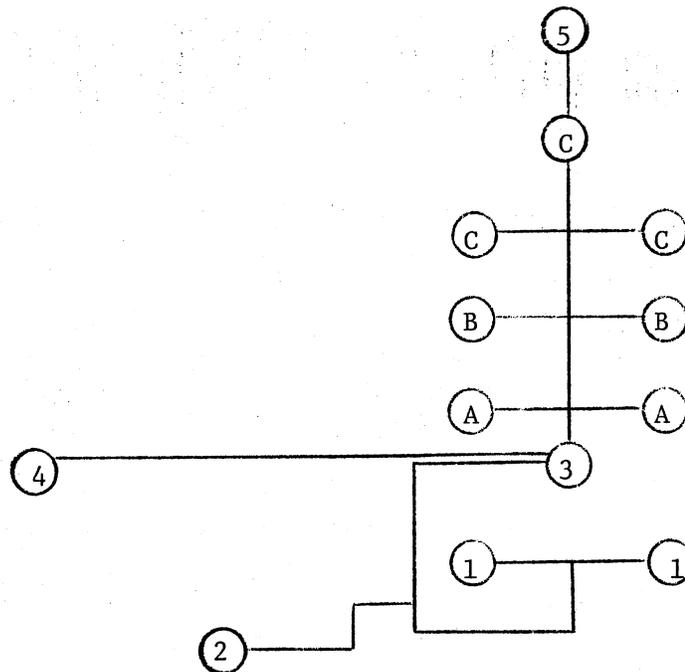
$$(2) \quad 2 \text{ min.} \times 40,000 \text{ claims} = \frac{80,000}{60} = 1333.33 \times \$3.40 = \$4,432/\text{yr.}$$

Present Assembly Area.

$$(1) \quad 5 \text{ min.} \times 40,000 \text{ claims} = \frac{200,000}{60} = 3333.33 \times \$3.40 = \$11,332/\text{yr.}$$

Proposed Assembly Area.

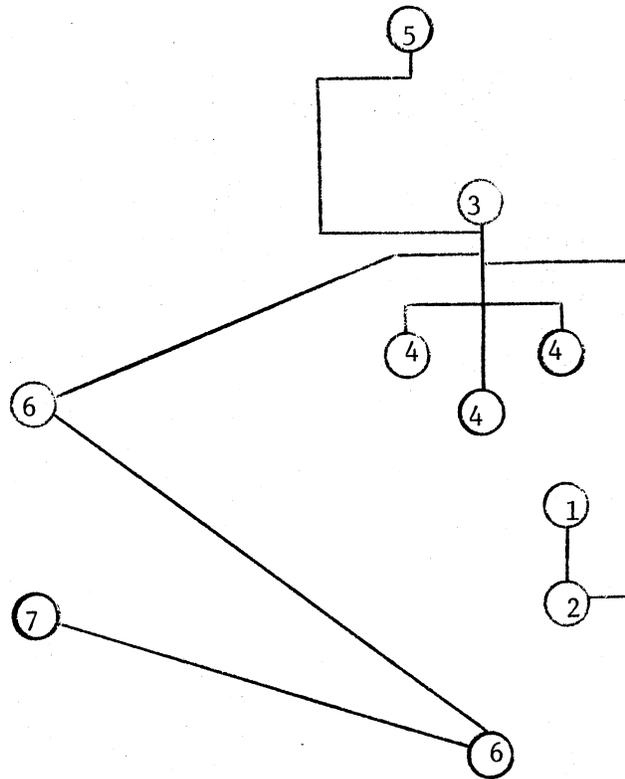
$$(2) \quad 3 \text{ min.} \times 40,000 \text{ claims} = \frac{120,000}{60} = 2000.00 \times \$3.40 = \$6,920/\text{yr.}^4$$



1. File on Vocational Rehabilitation (1) desk for review.
2. Lead assembly clerk (3) to Vocational Rehabilitation and pull files.
3. Lead assembly clerk to active control cards (2) and pull file cards.
4. Lead assembly clerk distributes files to clerks A, B, and C.
5. One assembly clerk to xerox machine (4) to do xeroxing in batches.
6. Files placed on out-processing table (5) and held for later action.

Total average movement per file - 170 feet.

Figure 25. Proposed Assembly Work Flow Diagram



1. File on mail intake table.
2. Date stamp file received.
3. File to active control cards for card check.
4. File to inactive control cards for card check.
5. Xerox card if necessary.
6. To file remains for prior file remains check.
7. To area routing boxes with file.

Total average movement per file - 150 feet

Figure 26. Mail Work Flow Dysfunction

Second Problem Statement of Analysis

Procedural directives from the Section Head appear to not be clearly disseminated to total staff. Through analysis of the data presented by the management analytical tools, corrections to problems of dysfunctional communication could be ascertained. Analysis of communication problems indicated that lines of communication were broken and in many instances the message was not getting through to all employees. By application of a corrective design employing the Procedure Flow Charts, it became apparent that communicated messages should follow a more definite line of command.

Communication affecting Section procedures should follow defined lines of second line supervisor to first line supervisor to examiner and clerical staff. If the procedures are disseminated along definite lines of command from a central point, there will be greater assurance that all involved units will be receiving a more clearly defined directive of operation.

Third Problem Statement of Analysis

Based on observation of Section operations, it appears that no centralized authority is in control of the functions of the Disability Insurance Section.

Establishment of Functional Communication Lines. Through analysis of data presented by the analytical tools, a hierarchial chain of well-defined authority delegation was constructed for many of the operations area work functions. This development alleviates hierarchial and authority delegation dysfunctions in these areas. The application of the charting analysis to the quality assurance file review work flow was

extremely valuable in elimination of authority delegation and hierarchy dysfunctions. The most advantageous changes in the quality assurance file review work flow, as indicated by the charts, was having the file in which an error was indicated, returned through a defined line of command. Results were that each employee who had a direct responsibility for the file processing would review the file and work for elimination of repeated errors. Through application of the charting tools, it was ascertained that authority delegation and hierarchy dysfunctions could be corrected in terms of the variance of operations between operational areas one and two. Directives would have to follow a well-defined pattern in the hierarchial structure if the directive is to be applied in a balanced manner between the areas.

Fourth Problem Statement of Analysis

It appears that written procedures describing the processing of claims by Section lay disability examiners, medical staff and clerical staff do not exist in the Disability Insurance Section.

Elimination of Dysfunctional Processing. The application of the analytical tools to Section work flow problems indicated that through clearly-defined procedural and policy guidelines, dysfunctional processing in the operations areas could be eliminated. In the charting analysis of variance of operational area file processing, it was revealed that in many instances employees were following varied processing methods. One operational variance was the previously discussed problem with the checking of the File Form 831 for concurrent file indication and the method in which the file was handled if there was an indication of such a case. Charting analysis indicated that if strict procedural guidelines were

followed, an efficient and accurate method of checking the File Form 831 for concurrent file indication would be realized in each operations area.

Charting analysis further indicated that if strict policy issues were defined by management, processing of a file by quality assurance would be more efficient. If management would determine a policy concerning review of the file by supervisory level personnel and what actions would be taken, then the need for arbitration could be reduced.

Fifth Problem Statement of Analysis

Based on observation of Section operations, it appears that redundant actions are occurring in the work flow of the Disability Insurance Section and a system to report the areas of repetitive errors and duplicate work processing is non-existent.

Establishment of an Error Reporting System. Analysis of data presented by the Procedure Flow Charts indicated that a system of control of incoming and outgoing cases was in effect. However, in the area of technical review and quality assurance review, a system of reporting errors which could be used in management control and training does not exist. By application of a design of technical review and quality assurance review reporting, it was ascertained that it would be beneficial to staff if the technical review and quality assurance review findings were tabulated each day. Through the application of Taylor's concept of management by exception, Disability Insurance Section supervisory personnel would decide what levels of error rates are to be tolerated.⁵ When error rates which result from the technical review and quality assurance review of the file go above the tolerated level, a report would be made to the appropriate supervisor. This reporting method would assist the Section

Head in reducing error rates and case delays caused by the repetitive returning of the file (Figure 27).

Summary

The primary objective of the thesis investigation discussed in this Chapter was to describe to the reader, the theoretical approach and method of research selected, and to present a discussion of the analysis of data in relationship to the primary and secondary hypotheses and problem statements. A summary of the thesis investigation, conclusions of the thesis study, thesis study limitations and recommendations for future studies will be presented in Chapter V.

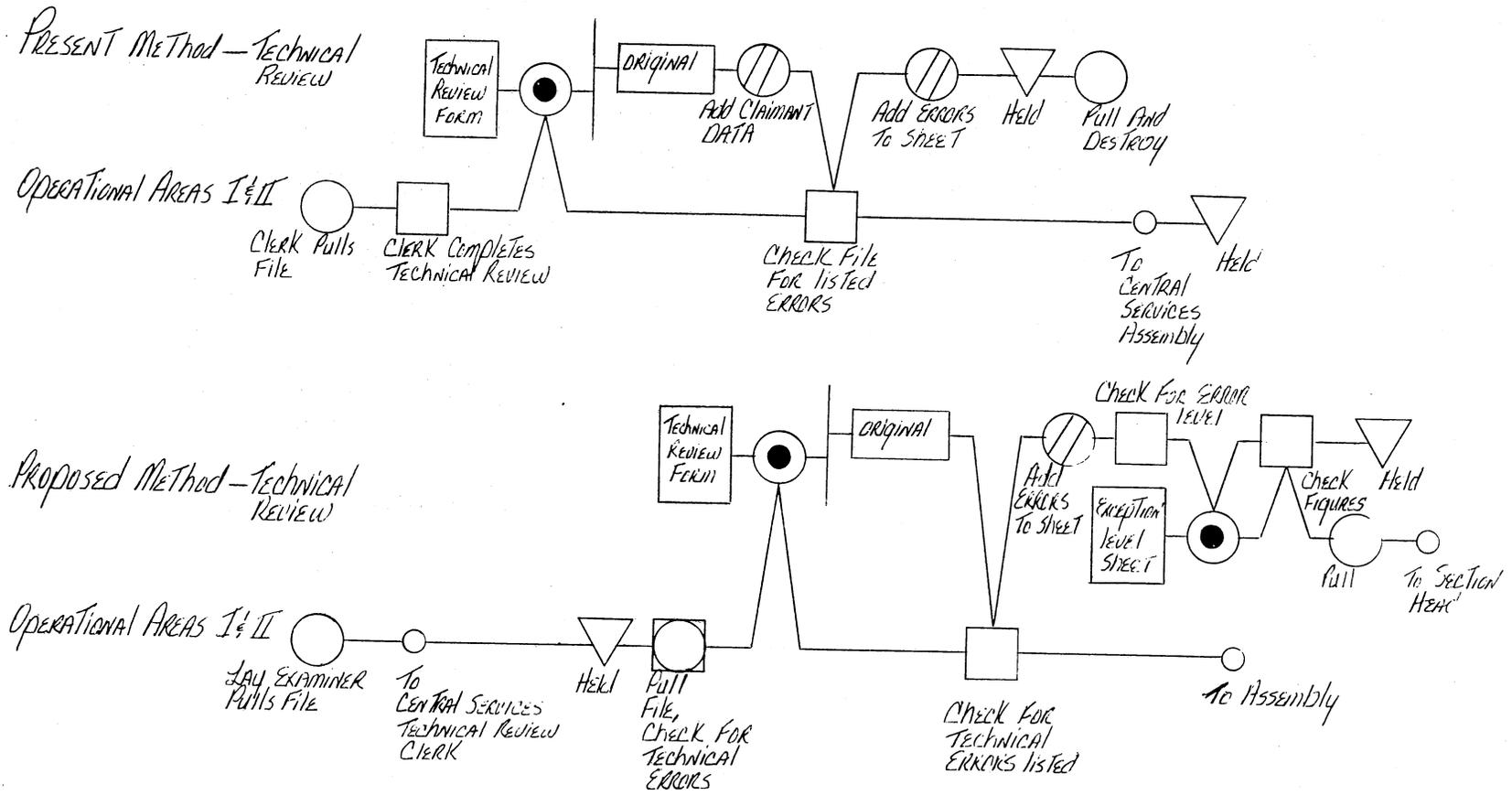


Figure 27. Proposed Error Reporting System Diagram

FOOTNOTES

¹Deobold B. Van Dalen and William J. Meyer, Understanding Educational Research (New York, 1962), p. 64.

²Van Dalen and Meyer, p. 64.

³William G. Scott and Terence R. Mitchell, Organizational Theory (Illinois, 1972), pp. 157-58.

⁴The formula is: Measure the approximate number of minutes it takes to perform any task. Multiply this by the number of transactions per year divided by 60. Multiply this by the hourly rate to determine the annual decrease or increase in clerical cost.

⁵Journal of Data Management (August, 1966), pp. 14-18, quoted in William J. Crowley, "Can We Integrate Systems Without Integrating Management?," Management Systems, ed., Peter P. Schoderbek (New York, 1971), p. 40.

CHAPTER V

SUMMARY, CONCLUSIONS, STUDY LIMITATIONS AND RECOMMENDATIONS

The basis for this thesis was an analysis of selected management problems confronting administrators of the Disability Insurance Section. In this Chapter, the conclusions of the study, study limitations, and recommendations resulting from the thesis investigation will be presented.

Summary

The purposes of this study were twofold: (1) to determine if selected management tools could be applied to the Disability Insurance Section to confirm the existence of five suspected problem areas and (2) to determine if the selected management tools could be applied to the Disability Insurance Section as a means of eliminating the confirmed management problems confronting administrators of the Section.

The study subject was a Social Security Administration disability determination unit, the Disability Insurance Section, Department of Social and Health Services, Health Services Division, State of Washington. The Washington State Unit was selected because of the convenience of the study unit to the author, the consideration that program dysfunctions were created by the substantial growth of program content and personnel since 1974, and management of the Section requested that the

Section be investigated for possible problem areas.

The basic function of the Disability Insurance Section is adjudication of claimant applications for Social Security and Supplemental Security Income benefits. The organizational structure of the Section consists of the Section supervisor, three operations supervisors, seven unit supervisors, sixty adjudicators, one chief medical consultant, fourteen part-time medical consultants, five clerk supervisors, and sixty-one clerical employees.

The three operational areas operate out of four buildings. The buildings are one-story single units located in a building complex. The third operational area is concerned with the function of providing central services support to the operations areas one and two. The functions of personnel in the central services area are the initial intake of the file and of all mail incoming to the operations area, maintenance of file records and of the active and inactive control cards, the out-processing of all mail and files, the assembly of all files completed for out-processing, the accounting procedures, the review of randomly selected files for indication of medical development or technical errors, and finally, the maintenance of a control card counting system which is continuously updated from section and federal production records.

Personnel in operations areas one and two process the files and all items related to the adjudicative process. The two operations areas are divided geographically on the basis of the sections of the State of Washington from which applications of claimants are received and processed. Operational area one adjudicates claims which were filed at social security district offices in Tacoma, southwestern Washington and eastern Washington. Operations area two personnel adjudicate claims which were

filed in Seattle and Northwestern Washington.

The specific problem areas of analysis were selected by observation and recommendation for study by management and Section personnel. Data collection was accomplished through the application of selected management tools. The selection of the various tools was based on the benefits that the tools could provide in presenting the most information about a particular situation.

The first procedure was selection of an organization for analysis. This step involved the selection of the Washington State Disability Insurance Section based on the previously discussed reasons.

The second step was to decide what theoretical approach would be applied to the thesis investigation. The theoretical approach selected was the functional theoretical type of theory. Theoretical approaches considered but not pursued were: (1) the hypothetical-deductive theory; (2) inductive theory and (3) model. In functional theory concepts, less emphasis is placed on elegant conceptualizations and logical-deductive procedures and more explicit emphasis is placed upon observation and data-oriented explanations. In functional theory, it is believed that the interaction of observational processes is necessary for scientific progress. Therefore, the two processes should proceed simultaneously and should be given more or less equal emphasis.

The method of research selected in analysis of the Disability Insurance Section was the descriptive method. The descriptive research data were expressed in verbal symbols and symbolic language. The qualitative data are the word descriptions of the analysis. The descriptive method of research was selected rather than the experimental or statistical methods of research. The Disability Insurance Section as a sample for

study could not be controlled to the extent which would be necessary for experimental methods.

The statistical method of research was not selected because of the size of the Section in terms of personnel and the information needed to correct Section processing dysfunctions. The Disability Insurance Section management problem required a type of analysis that could present data in a manner which would encourage discussion and application of new ideas and concepts. The application of the statistical method of research would prohibit such analysis and concept application.

After the method of research had been decided, a survey of the work flow was conducted in an effort to collect the detailed description of existing phenomena. This was done with the intent of employing the data to justify current conditions and practices and to make sound judgments regarding plans for improving them. Three types of information were collected during analysis of the Section: (1) data concerning existing status; (2) comparisons of status and standards, and (3) means of improving status.

The procedure of analysis through the application of the descriptive method of research was to apply management analytical tools to the total work flow, emphasizing selected phases of the work flow. Then, through analysis of the data, problem areas were located. The same analytical tools were then used to analyze how corrective measures would affect the detected problem areas when applied.

In the initial stages of the investigation, a decision was made to limit the number of tools used in the study. The reasons for the decision were: (1) literature concerned with the use of analytical tools in work studies indicated that employees are somewhat skeptical of studies

of their particular work functions--to approach work studies involving employees with a great number of analytical tools will only increase suspicions about the analysis process; (2) the data derived from analytical tool application takes a considerable amount of time to analyze for results--quick turnaround time related to recommended changes will add benefits to employee motivation and problem correction, and (3) the use of numerous analytical tools will only lead to duplication of the work study process as many of the tools produce the same information.

There were a number of analytical management tools applied to the investigation of the Disability Insurance Section. The tools were: the Work Flow Diagram; Procedure Data Charts; Procedure Flow Charts; Multi-Column Process Charts and the concepts of Cost/Benefit analysis.

Findings of the Study

The findings of the study were as follows:

1. Certain procedures and processing activities occurring in the Disability Insurance Section were dysfunctional to Section operations.
2. Procedures were not clearly disseminated to total staff.
3. Clearly-defined lines of hierarchy and authority delegation were non-existent in the Section.
4. Policy and procedural guidelines in the Disability Insurance Section were unclear.
5. Redundant actions were occurring in the Section's work flow and a system to report the areas of repetitive errors and duplicate work processing was non-existent in the Section.
6. Application of the analytical tools could be employed to resolve

those procedure and processing activities which were dysfunctional to the Disability Insurance Section.

7. Through the implementation of communication flow lines indicated as needed by the analysis of the management tools, directives would be more effectively distributed to staff.
8. Hierarchical lines could be established to effectively deal with Section operations.
9. Redundant work action could be eliminated and systems designed to increase efficiency in staff functions and Section operations.

Conclusions

The findings of the thesis investigation support the primary hypothesis: Selected management tools could be applied to the Disability Insurance Section to confirm the existence of five suspected management problem areas. The results of this study emphasize the fact that analytical tools of work measurement can be applied to organizations to locate problem areas. Smith found with earlier studies that task list outlines, specialized flow charts, questionnaires which are completed by staff personnel and the involvement of employees in other work measurement studies provides a type of analysis of how work in an office is currently being completed.¹

The work measurement tools were applied to the Disability Insurance Section for this same purpose, i.e., to find out how work was currently being done. The findings of the thesis further support Balk's concept that government presents no real technological difficulty for the application of work measurement techniques. Many of the tasks completed in government are routine and well-established techniques can effectively

be applied to work flow processes.² The results of the application of the work measurement tools revealed existing work processing dysfunctions, communications and hierarchy problems, the lack of written procedures and redundant and duplicate work processing.

The findings of the thesis investigation support the secondary hypothesis: Selected management tools could be applied to the Disability Insurance Section as a means of eliminating the confirmed management problems confronting administrators of the Disability Insurance Section. The results of the thesis investigation emphasized the fact that analytical tools of work measurement can be applied to organizations to eliminate confirmed work dysfunctions. Zanlin has noted that work measurement is being used to improve planning, schedule workloads, establish accurate work targets, reduce costs and increase productivity.³

Bloomfield noted that through the application of work measurement techniques, performance measurement, and quality control, employee performance can be increased significantly.⁴ Imundo wrote that the private sector has always applied measurement techniques of employee performance. Work measurement techniques have not been employed in government and where measurement techniques do not exist, it is difficult to measure effectiveness and efficiency.⁵

The major conclusion which can be drawn from the thesis study is that the tools of work measurement can be applied with positive results to government just as work measurement can be applied to business. A final conclusion from the study is that work measurement should be included as a part of the total program of managing the Disability Insurance Section. As Stone noted, work measurement, when included as a part of the total program, now ensures that employee effectiveness is accurately

monitored and that productivity is no longer gauged from prior costs or hours except for like jobs. Measurement systems should be based on analysis, not operations in other states or federal agencies.⁶

Study Limitations

The limitations of this study are as follows:

1. The time required for the type of analysis used in this study is substantial. Immediate solutions to sizable problems are not readily available.
2. Work measurement and production improvement methods often require complicated studies and calculations.
3. As Sexton noted, people resist change. People are also afraid that change resulting from work measurement will affect their lives in a negative way through the loss of income, position, or status.⁷
4. Many of the problems involved in implementing work measurement techniques and scientific management are peculiar to government. Service-oriented workloads are inconsistent and applying work measurement techniques to fluctuating work flows is more difficult than working with supply and demand trends.
5. Work measurement and production improvement methods frequently require weeks of costly, difficult training before they can be implemented. The mountain of paper work needed in conducting a work measurement study is considerable.
6. Finally, work measurement studies are costly, and government does not generally have funding available for work measurement studies.

Recommendations for Future Studies

It is recommended that further work measurement studies be conducted in the Disability Insurance Section. Efforts should be made to implement performance measurement standards for the staff. It is also recommended that studies be made of the working relationship between the Washington State disability determination unit and other federal and state agencies which provide medical information to the unit.

FOOTNOTES

¹Robert M. Smith, "Management Advisory Services," Journal of Accountancy (July, 1975), p. 28.

²Walter L. Balk, "Technological Trends in Productivity Measurement," Public Personnel Management, IV (1975), p. 128.

³Kjele B. Zanlin, "Better Work Management With MOST," Management Review, LIV (1975), p. 504.

⁴Robert M. Bloomfield, "The Changing World of the Secretary," Personnel Journal (1973), p. 796.

⁵Louis V. Imundo, Jr., "Ineffectiveness and Inefficiency in Government Management," Public Personnel Management, IV (1975), p. 90.

⁶Daniel E. Stone, "Productivity and Performance/Providing the Same Services for No Increased Cost," Public Personnel Management, LVII (1975) p. 15.

⁷Ronald L. Sexton, "Change," Word Processing (New York, 1975), p. 10.

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VITA

Jerry David Guhl

Candidate for the Degree of

Master of Arts

Thesis: THE USEFULNESS OF SELECTED MANAGEMENT TOOLS IN IDENTIFYING AND ELIMINATING DYSFUNCTIONAL WORK PROCESSES IN THE DISABILITY INSURANCE SECTION, DEPARTMENT OF SOCIAL AND HEALTH SERVICES, STATE OF WASHINGTON

Major Field: Political Science

Biographical:

Personal Data: Born in Tulsa, Oklahoma, October 2, 1946, the son of Mr. and Mrs. Charles Martin Guhl.

Education: Graduated from Nathan Hale High School, Tulsa, Oklahoma, in May, 1964; received Bachelor of Arts degree in Political Science from Oklahoma State University in 1972; Ben S. Graham Work Simplification Conferences in February, 1975; "Paper work Flow and Analysis:", Federal Management Training Institute, Seattle, Washington, 1975; "Program Analysis", Federal Management Training Institute, Seattle, Washington, 1975; completed requirements for Master of Arts degree at Oklahoma State University in May, 1976.

Professional Experience: Administrative Assistant, Disability Insurance Section, Department of Social and Health Services, State of Washington, 1974 to present. Prepared analytical data for Ben S. Graham Work Simplification Conference, Washington D. C., July, 1975. Applied work method concepts for improving processing efficiency of a personnel classification questionnaire, Health Services Division, Department of Social and Health Services, State of Washington, January, 1976. Currently performing work methods analysis of the Venereal Disease Unit, Health Services Division, Department of Social and Health Services, State of Washington, February, 1976 to present.

Professional Organizations: American Society of Public Administration; American Academy of Political and Social Science.