EVALUATING COST IMPACT ON SMALL HEALTHCARE PROVIDERS: THE FEDERAL MANDATE TO TRANSITION FROM THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM), TO THE INTERNATIONAL CLASSIFICATION OF DISEASES, 10TH REVISION, CLINICAL MODIFICATION (ICD-10-CM)

BY

HEZEKIAH CONWAY

MHS, Washburn University, 2015

A PROJECT

SUBMITTED TO THE DEPARTMENT OF ALLIED HEALTH OF WASHBURN UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF HEALTH SCIENCE

[Signatures of committee members]
EVALUATING THE COST IMPACT OF TRANSITIONING TO ICD-10

ABSTRACT

The United States health care system is mandated by the Department of Health and Human Services to adopt the new medical code set, ICD-10-CM (Services(HHS), 2009). Prior to the new medical code set, ICD-10-CM, the United States health care system has utilized the ICD-9-CM medical code set for the past 30 years (Cassidy, 2011). The government mandate is the largest mandate the US health care system has undertaken. Kurt Lewin’s Theory of Change provides a strategic approach to identifying the American Health Information Management Association as the driving force in the examination of adopting the new medical code set, and small healthcare providers as the restraining force in the examination of adopting the new medical code set. The purpose of the project is to evaluate the impact cost will have on small healthcare providers who are required to adopt the new medical code set, ICD-10-CM. The research method for this project consists of secondary data collection, and content analysis. The results of the project show small healthcare providers will be impacted by cost in multiple areas of operation if mandated to implement to the new medical code set, ICD-10.

Keywords: International Classification of Diseases, Department of Health and Human Services, American Health Information Management Association, small healthcare provider, ICD-10-CM, Center for Medicare and Medicaid Services World Health Organization (WHO).
EVALUATING THE COST IMPACT OF TRANSITIONING TO ICD-10

Abstract .........................................................................................................................II

Table of Content ........................................................................................................II

Problem Statement .....................................................................................................4

Background of the Problem .........................................................................................5

Significance of the Project ..........................................................................................6

Project Objectives ......................................................................................................7

Methodology ................................................................................................................8

Advantages of Secondary Data Analysis .....................................................................9

Historical Review of ICD .............................................................................................9

Theoretical Framework ...............................................................................................12

  Driving Force (American Health Information Management Association) ...........13

  Restraining Force (Small Healthcare Providers) ......................................................15

  State of Equilibrium (Department of Health and Human Services) ....................17

  Unfreezing Stage of Change ....................................................................................18

  Transitioning Stage of Change ................................................................................20

    ICD-9 compared to ICD-10 ..................................................................................20

    Small Healthcare Provider Implementation Cost .................................................22

  Refreezing Stage of Change .....................................................................................24

Review of Literature ...................................................................................................25

Outcomes ....................................................................................................................27

Conclusion ..................................................................................................................29

References ..................................................................................................................30
STATEMENT OF THE PROBLEM

The federal government’s decision to mandate healthcare providers covered under Health Insurance Portability and Accountability Act to transition to ICD-10-CM without a budget to support the mandate has proven challenging to all sectors of the healthcare community, but the impact of the mandate is especially costly to the small healthcare provider. Federal mandates often require sweeping changes that can be expensive for small health care providers to implement and difficult to administer and enforce (Newcombe, 1981). The United States transition from ICD-9-CM edition to the ICD-10-CM edition has not been without its difficulties. The transition has impacted all areas of the healthcare community. The asynchronous effort by the government to manage the United States healthcare system’s transition from the ICD-9-CM edition to the ICD-10-CM edition has impacted Health Information Management systems in multiple areas in the healthcare community. Healthcare providers have been impacted by the demands of the transition, and small hospitals are feeling the impact of the transition. Healthcare providers are having some challenges related to transitioning to the new ICD-10-CM medical classification system (Newcombe, 1981).

The problem with providers transitioning from ICD-9-CM to ICD-10-CM is the budget for such a transition. Small healthcare providers regard ICD-10-CM as a costly, unfunded mandate that reduces the amount of time providers can spend with patient care (Janiszewski, 2015). The evaluation of the cost impact of the ICD-10-CM transition will evaluate the cost small healthcare providers will have to budget for to comply with the government mandate to transition to ICD-10-CM.
BACKGROUND OF THE PROBLEM

The National Committee on Vital and Health Statistics (NCVHS) is the source to gather a clear understanding on the background of the federal mandate requiring healthcare providers to adopt, the new medical code set.

The National Committee on Vital and Health Statistics has spent the past decade and a half studying the feasibility, appropriateness and timeliness of replacing the current ICD-9-CM classification system with the new ICD-10-CM (Green, 2014). Between 1997 and 2003, the National Committee on Vital and Health Statistics were holding public hearings to gather information related to the adoption of the new medical code set (Green, 2014). The National Committee on Vital and Health Statistics is very important in recognizing the origin of the problem being argued in this discussion. The NCVHS listened to agencies in opposition to transitioning to the new medical code set, and those in favor of the adoption of the new medical code set. Healthcare providers made the argument, the issues surrounding the push to a replacement medical coding system in the United States are challenging (Green, 2014). There are concerns among the health care community, who are in favor of adopting the new medical coding system that argue ICD-9-CM is an antiquated system that cannot meet the current and emerging needs of providers. The NCVHS listened to healthcare providers make the argument that the cost of implementing the new medical code set, ICD-10-CM would be astronomical. Healthcare providers opposing the adoption of the new medical code set believe given the widespread use of ICD-9-CM, there would be significant implementation costs related to hardware and software changes, lost productivity, and training, among many other business process costs (Green, 2014). After the NCVHS finished listening to the debate, the committee
recommended the adoption of the new medical code set to the Department of Health and Human Services.

On January 16, 2009, the Department of Health and Human Services published in the Federal Register, a final rule, in which the Secretary adopted the ICD-10-CM and ICD-10-PCS medical code sets as the HIPAA standards to replace the previously adopted ICD-9-CM, with a compliance date of October 1, 2013 (Green, 2014). The final rule did not prevent healthcare providers from arguing, a federal mandate to all healthcare providers to adopt the ICD-10-CM and ICD-10-PCS medical code set will have a cost impact on small healthcare providers. The assumption that adopting a new medical code set will impact the cost of small healthcare provider’s ability to operate is what is being evaluated in the theoretical framework of change.

**SIGNIFICANCE OF THE PROJECT**

Evaluating the cost impact, the ICD-10-CM transition is having on small healthcare providers is important because the evaluation will provide a foundation for future research related to the cost of organizational change. The importance of this project will help in recognizing organizational characteristics important to successful transition. This project is meaningful because, this project identifies problems related to major organizational transitions. The importance of an assessment is to learn about possible solutions to the problems being addressed. The project informs stakeholders of the structure of the two medical coding systems. The project is important because a change project of this size consists of multiple phases; this project will discuss the different phases of a change project. This project will provide future guidance to organizations when faced with system transitions. The research collected for this assessment will benefit similar change projects in the future. This project is meaningful for future
students interested in studying about change projects, and the components involved in big corporations implementing change. This project is important because it adds to the magnificent history of the International Classification of Diseases. This project is important because students will study health management and learn the history about the ICD-9-CM to ICD-10-CM transition. The project is meaningful because it teaches students about the hierarchy of healthcare in the United States. Students in healthcare programs will learn briefly about the role of the Centers for Medicare and Medicaid Services (CMS). The project is constructive because the project will assess the impact the transition had on healthcare providers.

**PROJECT OBJECTIVES**

The objective for evaluating the cost impact the federal mandate to transition to the new medical code set consists of examining the business operation cost that will impact small healthcare providers. The evaluation will examine how the cost of implementing the new medical code set will impact the cost of staff education and training. The cost impact evaluation will analyze the impact the transition will have on small healthcare provider’s business process. The objective of this evaluation will also involve examining the changes to superbills, information technology system changes, increased documentation cost, and cash flow disruption. These are the areas of concern in the evaluation, and they will be the focus of the discussion. The objective of the evaluation will also be to examine the processes involved in implementing organizational change after using a system for over three decades.

This evaluation will utilize different theories of change to assist with identifying varying stages of the process of change. Utilizing the theories of change will assist this project with identifying the process required to successfully implement change. The objective of discussing
the impact of cost to small healthcare providers in the context of change is critical to the evaluation process because it provides a framework that allows for the project to understand what is being evaluated, and when to evaluate (Jacobs, 2013).

In addition to identifying sectors of the small healthcare provider impacted by the transition, this evaluation is also set on demonstrating how the theory of change concepts are applicable to the transitional success of an organizational change of this size, by examining the driving forces involved in the change. This evaluation will also identify the restraining forces, driving forces, and the point of equilibrium in the process of change (Jacobs, 2013). This evaluation uses the theory of change to evaluate the federal mandate to healthcare providers, requiring them to transition to a new medical code set. The evaluation will identify the processes involved in the theory of change and discuss the stakeholders and examine the stages in the change process healthcare providers must achieve to successfully implement, ICD-10.

**METHODODOLOGY**

Secondary data collection was the type of methodology used to collect the data necessary in evaluating the cost impact the federal mandate to transition from the International Classification of Diseases 9th revision, clinical modification to, the International Classification of Diseases, 10th revision, clinical modification is having on small healthcare providers. Secondary data collection methodology is the research method selected for this project because, secondary data is one type of quantitative data that has already been collected by someone else for a different purpose (Crossman, 2014). Secondary data analysis was selected because secondary data can be collected from many different sources (Crossman, 2014). Secondary data analysis is an appropriate research method for this project because the federal government, who played a major role in passing legislation, has a plethora of primary data available to researchers studying
EVALUATING THE COST IMPACT OF TRANSITIONING TO ICD-10

the topic of ICD. The Department of Health and Human Services, the facilitator of the United States adoption of the new medical code set, ICD-10-CM has a database of sources, books, journals, periodicals, abstracts, research reports, conference annual reports, available for researchers seeking data about ICD that has already been collected (Crossman, 2014). Secondary data sources can also be classified as electronic sources, on-line databases, and the Internet.

ADVANTAGES OF SECONDARY DATA ANALYSIS

To be able to report the results of this evaluation of the cost impact of the new medical code set transition, a large amount of data had to be analyzed. Under the circumstances of the study, using secondary data collection methods proved to be a big advantage due to the economics that have been necessary to gather the data for this evaluation (Crossman, 2014). Secondary data analysis was beneficial to this study because the primary data collection process has already been completed (Crossman, 2014). Using secondary data collection methods saved time, the data about the International Classification of Diseases is very large, with many different sub-topics to choose from. There were some sources that were used that required pre-registration before the article could be viewed, but in general this project did not consider cost while performing the evaluation (Crossman, 2014).

HISTORICAL REVIEW OF ICD

To study the impact of the International Classification of Diseases (ICD), it is important to understand the meaning, as well as, its purpose. The first attempt at classifying diseases was by John Graunt, a statistician born in London England, in the 1600s. John Graunt’s purpose for developing a system to classify diseases was for the purpose of classifying death rates according to cause of death. Graunt’s idea would later be known as, the London Bills of Mortality (Topaz,
2013). Since the 1600s, Graunt’s idea to classify diseases has evolved to a system that is used and recognized internationally in the healthcare industry. Two centuries after Graunt started classifying death rates by, the cause of death, a medical statistician by the name of William Farr, improved on Graunt’s idea by classifying diseases for the General Register Office of England of Wales (Topaz, 2013). Farr’s effort to improve on a two-hundred-year-old idea continued to show sustained usefulness, William Farr improved on the disease classification by arranging diseases into groups. William Farr began classifying diseases by groups, epidemic, general, local to anatomical site, developmental, and those deaths caused due to violence (Topaz, 2013). This concept of classifying diseases caught the attention of the 1885 Bertillon committee in Paris, where representatives from England, Germany, and Switzerland met to consider adopting the idea of classifying diseases into categories. From the 1600s to present time, the International classification of diseases has been revised multiple times. The practice of revising the classification of disease periodically began after the 1885 Bertillon committee, which ended with the London Bills of Mortality classification of death rates being renamed to the Bertillon Classification of Causes of Death (International, 2015).

The Bertillon Classification of Causes of Death was the first disease classification system that would eventually receive approval and adoption by the international community (International, 2015). The sustainability of classifying diseases captured the attention of the international healthcare community. By the 1900s, the concept of the classification was renamed to the International List of Causes of Death (Topaz, 2013). After three centuries of being developed and revised, the practical application of the classification of diseases started to gain interest from more entities among the healthcare community.
During the Industrial revolution, the international healthcare community fostered the disease classification system and expanded the original categories (Topaz, 2013). The attention the international healthcare community gave the International List of Causes of Death promoted the healthcare community to assign, the responsibilities and duties for revising the classification of diseases to the Health Organization of the League of Nations, known today as the World Health Organization (WHO) (International, 2015).

The WHO published and revised ten editions of the International Classification of Diseases. From the first edition to the eighth edition, there has been very little change related to purpose and structure of the classifications. The WHO would have their international health conferences, and announce the new edition and the international healthcare community would adopt the use of the new edition (International, 2015).

The status quo changed in 1975 when, the ICD-9 edition was published. Similar to past practices, the international healthcare community adopted the ICD-9th edition, and continuously began using the classification of diseases for the purposes mentioned early, however, the United States independent from the WHO, started experimenting with the classification of diseases applicable to us. The United States adopted the ICD-9-CM edition in 1975, other sectors of the healthcare community, in addition to medical statisticians, started benefiting from the functional structure of ICD-9 (International, 2015).

Physicians were using the medical coding system to describe patient’s diagnosis, symptoms, disorders, procedures, and various other health care services rendered. Physicians were using the codes to establish medical necessity for patient visits, and they were able to use the ICD-9 codes to communicate to insurance companies, their reason for requesting insurance
reimbursement (Topaz, 2013). The United States healthcare community, flattered with the many uses of the ICD-9-CM edition, failed to pay attention to the shortcomings of the ICD-9-CM edition, resulting in a decision that would prove challenging to the current healthcare providers (Topaz, 2013). The fact that the United States healthcare providers have been utilizing the ICD-9-CM edition for the past forty years is significant for this evaluation because, the evaluation will show evidence of how difficult change is, and how small healthcare providers are opposed to the transition because of the cost associated with the implementation.

THEORETICAL FRAMEWORK

The structure most suited for discussing the theory of this project, can best be analyzed through the theory of change. In the healthcare environment, change is a regular occurrence. The implementation of new medical code sets is one aspect of the changes taking place in the information technology revolution (Bozak, 2003). As a result, healthcare providers have widely varying attitudes towards the implementation of a new medical code set. To successfully transition from the old medical code set, ICD-9-CM, to the new medical code set, ICD-10-CM, healthcare providers must be aware of the factors that encourage, and those that impede change. Healthcare providers must develop a change strategy to ensure they are able to meet the federal mandate to transition to the new medical code set. This project presents the Lewin’s theory of change to assist with formulating a discussion about the federal government’s mandatory rule to healthcare providers to implement the new medical code set, ICD-10-CM. Lewin’s theory of change establishes a framework appropriate towards leading a discussion about the evaluation of the new medical coding system implementation cost on small healthcare providers (Bozak, 2003).
The theoretical concepts outlined in Lewin’s theory of change will assist with guiding this project because the concepts were developed to assist with identifying the important subjects related to the examination of the cost impact the federal mandate to transition to a new medical code set is having on small healthcare providers. Federal mandates often require sweeping changes that can be expensive for small scale operations (Newcombe, 1981). Healthcare providers have been overwhelmed with federal mandates during the past decade. Healthcare providers have been subject to a rapid expansion and intensification of external pressures for health information technology. This pressure from external forces is identified as the driving forces (Kritsonis, 2004).

**AMERICAN HEALTH INFORMATION MANAGEMENT ASSOCIATION**

The American Health Information Management Association (AHIMA) is the driving force behind the push for healthcare providers to transition from ICD-9-CM to ICD-10-CM. Health Information Management is one of the professions arguing for the ICD-10-CM transition. AHIMA continues to advocate for Health Information Management’s full participation as one of many valued professional assets necessary for success in ICD-10-CM adoption (Cassidy, 2011). Health information management’s involvement with disease classifications can be traced back to the early 20th century (Cassidy, 2011). The health information management profession has been the recognized expert and leader in data collection, classification, and reporting for several years (Cassidy, 2011). Federal government representatives are listening to the AHIMA recommendation on issues related to the ICD-10-CM medical code set because AHIMA has been the leader in health information management for the past century. The AHIMA is an 85-year-old not for profit association of professionals who are educated, trained, certified and working in the field of health information management (Cassidy, 2011). AHIMA is the driving force behind the
new medical code set because with over 67,000 members in the United States, AHIMA health information professionals work in over 40 employment types associated with the nation’s healthcare industry in some 50 plus job types (Cassidy, 2011). Leadership in the AHIMA argue, now is the time to embrace ICD-10-CM (Cassidy, 2011). The AHIMA is the driving force behind the push for adopting the new medical code set because, since the 1960s AHIMA has been a member of the cooperating parties for U.S. use of ICD classification systems (Bowman, 2013). The AHIMA is the driving force behind the new medical code set adoption because early on in the new medical code sets development, the AHIMA recognized that the old medical code set, the ICD-9-CM classification system could not meet the required uses for many of the modern healthcare delivery systems of today (Bowman, 2013).

The AHIMA argued to the Department of Health and Human Services, that the ICD-9-CM medical code set was no longer meeting the needs of the U.S. health system. AHIMA argued that the ICD-9-CM classification system could not keep up with an accelerating body of knowledge regarding disease and technical improvement, as well as the need for more detailed knowledge for research and community health improvement (Bowman, 2013). AHIMA has argued that correct use of ICD-10-CM could eliminate cases of fraud because the significantly more detailed coding system permits less guess work on the part of the coder (Cassidy, 2011). The AHIMA made the argument to the Department of Health and Human Services that, the ICD-9-CM medical code set was introduced to the United States in 1979 (Houser, Morgan, Clements, & Hart-Hester, 2013). The AHIMA believed the ICD-9-CM medical code set has out
lived its usefulness. ICD-9-CM is over 30 years old, and the new age of technology has brought numerous improvements in medical procedures and applications impacting the effectiveness of the ICD-9-CM coding system (Houser, Morgan, Clements, & Hart-Hester, Spring 2013). AHIMA are advocates for the adoption of the new medical code set because AHIMA believes the transition to the new medical code set will advance healthcare in quality measurement, public health, research, and organizational monitoring, as well as quality performance (Bowman, 2008). The transition to a new medical code set will not be without some major challenges. Small health care providers will undoubtedly experience some major disruptions during the transition to ICD-10-CM, and the small healthcare providers are resistant to change to the new medical code set, making the argument that, transitioning to the new medical code set, ICD-10-CM will have negative cost impact on their healthcare practice in many area of operation.

SMALL HEALTHCARE PROVIDERS AGAINST CHANGE

Small healthcare providers are the restraining forces in this evaluation of cost impact to transition from the old medical code set, ICD-9-CM to the new medical code set ICD-10-CM. Small healthcare providers are restraining from transition to ICD-10-CM because it is really burdensome to small practices trying to keep up with all the mandates from the federal government (Kyle Murphy, 2015). Small healthcare providers are restraining from implementing the proposed new medical code set by any means possible. Small healthcare providers have collaborated with senators to introduce bills that would prevent the country’s healthcare system from transitioning to the new medical code set (Kyle Murphy, 2015). Small healthcare providers are restraining from implementing ICD-10-CM because the transition requires costly process changes. Small healthcare providers are making the argument that the federal mandate will force small provides to change their business process in many areas of
operation, and these changes will put them in an economic disadvantage if the new medical code set is adopted (Kyle Murphy, 2015). Healthcare providers are restraining from adopting the new medical code set based on their argument, the timeline set as the compliance date is too short and does not allow for proper industry education and outreach and that the tight timeline would constitute a major burden to the industry (Services(HHS), 2009). Small healthcare providers are concerned that a mandatory rule to transition to ICD-10-CM, might bankrupt small physician practices. Healthcare providers are concerned with increased cost due to delayed reimbursements, lost productivity, costs of training, and expenses for software and hardware. Small healthcare providers are restraining from adopting the new medical code set for a plethora of reasons, and one of those reasons is a lack of access to printed ICD-10 code set books, forcing small providers to purchase electronic systems and software. Many small providers are not equipped with electronic systems to support ICD-10 and cannot afford to hire additional staff or re-train existing staff in ICD-10 coding. Small providers are restraining from adopting the new medical code set because the cost impact could add up to millions of dollars for the small practitioner. The new medical code set includes five times as many codes as the ICD-9 code set, the different arrangement of codes will require more documentation, revised forms, retraining of staff and physicians, and changes to software and other information technology. Implementing the new medical code set will result in many potential costs to physicians. The small healthcare provider is concerned that implementing the new medical code set will have an impact on staff education and training, business process analysis, changes to superbills, information technology system changes, increased documentation cost, and cash flow disruptions. As the restraining force in this mandated transition to a new medical code set, small healthcare providers made some convincing arguments against the adoption of the new medical
code set. The arguments from the small healthcare providers convinced, the Department of Health and Human Services to postpone the adoption of the new medical code set.

In the framework of the evaluation, Lewin’s theory of change identifies the American Health Information Management Association has the driving force to the proposed adoption of the new medical code set, ICD-10-CM, the small healthcare providers are the restraining force against the adoption. The final concept to Lewin’s theory of change is the concept of equilibrium, the act brings the driving force and the restraining force together to complete the transition. The federal government is the equalizer in this evaluation, through the Department of Health and Human Services, the theory of change will illustrate through its stages, how the driving force, and the restraining force collaborated together in the transition from the old ICD-9-CM medical code set, to the new ICD-10-CM medical code set.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Department of Health and Human Services (HHS) is the government agency responsible for facilitating the effort between the driving force for the new medical code set, and the restraining forces against the transition to the new medical code set, ICD-10-CM. The HHS took legislative action to create a state of equilibrium between the driving force for the new medical code set, ICD-10-CM, and the restraining force against the new medical code set. Commenters from both positions made legitimate points in their arguments for or against the transition to a new medical code set. The legislative action by the HHS would give both the driving forces and the restraining forces time to look at alternatives to the new medical code set. To bring both entities to a state of equilibrium, the HHS published a final rule. The final rule enacted by the HHS ruled that, the compliance date for the International Classification of
Diseases, 10th Revision, Clinical Modification (ICD-10-CM) will be delayed to, October 1, 2015. This rule would allow small healthcare providers to continue to use the International Classification of Diseases, 9th Revision, and Clinical Modification through September 30, 2015 (Carl, 2014). The HHS considered different alternatives to a one-year delay, but decided on allowing the implementation to be postponed until October 1, 2015. Driving forces argued that a delay lasting longer than one year would increase cost significantly (Carl, 2014). Driving forces argue that a delay longer than one year could render current ICD-10 system updates obsolete, which would diminish the investments driving forces have already made to prepare for the ICD-10 transition (Carl, 2014). The HHS position allows them to bring the driving forces and restraining forces to a state where no change occurs. The HHS planned for the period of equilibrium to end October 1, 2015 (Carl, 2014). The HHS actions were only a temporary solution to the adoption of the new medical code set, ICD-10-CM, now the stages in Lewin’s theory of change can help with leading the discussion about the cost impact the ICD-10-CM transition is having on small health care providers.

UNFREEZING STAGE OF IMPLEMENTING THE NEW MEDICAL CODE SET

In the analysis of the evaluation of the new medical code set, the Lewin’s theory of change outlines the stages that help with discussing the implementation of the new medical code set, ICD-10-CM. When the HHS established a state of equilibrium between the driving forces for implementing the new medical code set, and the restraining forces against the new medical code set, that created an environment between the two driving forces in which working together to ensure the federal mandate would occur in the time frame set by the government.
During the first stage of transitioning to the new medical code set, the federal government under the Department of Health and Human Services, enacted a public rule that required all entities under HIPAA to complete the implementation of ICD-10, by October 1, 2015 (Carl, 2014). This action by the federal government was the method used to make sure that all HIPAA covered entities successfully implement ICD-10-CM. The first stage of the implementation is necessary because of the restraining forces resistance to transitioning to the new medical code set. The first stage, known as the Unfreezing stage is important in overcoming the strains of healthcare provider resistance (Kritsonis, 2004). During the Unfreezing stage of the change process, the federal government via the Coordination and Maintenance Committee, partially placed a freeze on ICD-9-CM codes, prior to the implementation of the ICD-10-CM codes. The partial freeze plan would end one year after the implementation of the new medical code set, ICD-10-CM. Between the driving forces and the resistance forces, the Unfreezing stage of the transition seems to have brought the forces closer together in agreement to a partial freeze on the ICD-9-CM code set. To ensure all HIPAA covered providers implement the new medical code set, the Department of Health and Human Services issued a final rule, the Protecting Access to Medicare Act of 2014, which prohibits providers from adopting the new medical code set before October 1, 2015, and prohibits providers from submitting claims using the old medical code set ICD-9-CM after October 1, 2015 (Carl, 2014). Without the Unfreezing stage in Lewin’s theory of change, the ICD-10 implementation would most likely be delayed indefinitely due to the increased resistance from the small healthcare providers, but the action to freeze the adoption of the new medical code set until October 1, 2015, gives small healthcare providers the time to adopt to the new medical code set, ICD-10-CM. The first stage in Lewin’s theory of change forces resisting forces to recognize that change is needed, and preparation and readiness is the
best action to take to ensure a successful transition. Forces understanding that change is needed are more ready to move on to the second stage in Lewin’s theory of change, which consist of analyzing the current situation, and placing new structures and process in place to achieve the desired outcomes (Kritsonis, 2004).

**TRANSITION STAGE OF CHANGE**

In the evaluation of the cost impact of the transition from the old medical code set, ICD-9 to the new medical code set, ICD-10, the examination found that the transition stage is the most time consuming and costly stage involved in the change (Kritsonis, 2004). It is the transition stage of change that small healthcare providers are arguing is too costly to implement. It is in the stage of transition the leaders involved in the change are able to examine the structural differences between the two systems to determine which is better.

**ICD-9-CM COMPARED TO ICD-10-CM**

The debate between the health information management professionals, and small healthcare providers, on the issue of cost impact of transitioning to a new medical code set can be better understood when the two medical code sets are compared.

Small healthcare providers regard ICD-10-CM as a costly, unfunded mandate that does not enhance the quality of care to their patients (Madara, 2014). ICD-10-CM is a clinical modification of the World Health Organization’s ICD-10 classification. (Barta, McNeill, Meli, Wall, & Zeisset, 2008). Health information management professionals are the driving force for ICD-10 because the ICD-10-CM system consists of more than 68,000 codes, compared to approximately 13,000 ICD-9-CM codes (Barta, McNeill, Meli, Wall, & Zeisset, 2008). Health information management professionals want ICD-10-CM implemented because ICD-10-
CM codes have the potential to reveal more about quality of care (Barta, McNeill, Meli, Wall, & Zeisset, 2008). ICD-10-CM differs from ICD-9-CM in its organization and structure code composition and level of detail (Barta, McNeill, Meli, Wall, & Zeisset, May 2008). ICD-9-CM consists of three to five characters, compared to ICD-10-CM three to seven characters (Barta, McNeill, Meli, Wall, & Zeisset, 2008). The first digit in ICD-9-CM is numeric or alpha, compared to the first digit in ICD-10-CM is alpha (Barta, McNeill, Meli, Wall, & Zeisset, 2008). The ICD-9-CM coding system has numeric second, third, fourth, and fifth digits, and there are always at least three digits, with a decimal placed after the first three characters. For example, an ICD-9-CM code format looks like; XXX.XX. The first three characters describe the disease category, and the fourth and fifth digits describe, the etiology, anatomic site, and/or manifestation (Barta, McNeill, Meli, Wall, & Zeisset, 2008). The ICD-10-CM code structure uses up to seven digits, with the seventh digit extensions representing visit encounter or sequelae for injuries and external causes (Barta, McNeill, Meli, Wall, & Zeisset, 2008). An example of an ICD-10-CM code is XXX.XXX X. The code consists of three to seven characters. The first digit is alpha and the ICD-10-CM code system uses all letters except U. The second and third digits are numeric and the fourth, fifth, sixth and seventh digits can be alpha or numeric, with the decimal placed after the first three characters (Barta, McNeill, Meli, Wall, & Zeisset, 2008). The first three characters describe the disease category, and the fourth, fifth, and sixth characters describe the etiology, anatomic site, and/or the severity of the injury or disease (Barta, McNeill, Meli, Wall, & Zeisset, 2008). Small healthcare providers will transition to the new medical code system due to the federal mandate that will go into effect October 1, 2015 (Services(HHS), 2009). Without the federal mandate, the cost impact to implement the new medical code set would be the reason many small healthcare
providers would argue is the reason to continue using the old medical code set, ICD-9-CM. Examining the cost of implementing the new medical code set will help complete the evaluation of the cost impact the new medical code set will have on small health care providers.

**SMALL HEALTHCARE PROVIDER COST**

Small healthcare providers that operate under HIPAA will be required to implement ICD-10-CM. The transition is proving to be a costly endeavor for providers trying to comply with the federal mandate. Small healthcare providers will incur cost in many areas within their operation to meet the standard operating procedures required to operate with ICD-10-CM.

There have been many surveys analyzing the impact of implementing ICD-10 on physician healthcare practices (Blanchette, 2015). The surveys examined for this evaluation consisted of small healthcare providers. The Nachimson Advisors survey defined a small healthcare provider as a practice that is comprised of three physicians and two administrative staff (Blanchette, 2015). Studies show the total cost impact of the ICD-10-CM mandate on individual providers is estimated to cost $83,290 per small healthcare provider (Janiszewski, 2015). The evaluation of cost to implement ICD-10-CM examined the impact in six areas. In the evaluation of staff education and training, studies show providers will incur cost in staff education and training due to the structure and organization of the new code set (Blanchette, 2015). In addition to physicians requiring training, specific training will be required for clinical and administrative staff involved in contracts, information technology, coding of medical and administrative records, documenting patient activities, and health plan relations. Studies show, the cost impact of ICD-10 mandate on individual provider practices in the area of staff education and training will cost small practices around $2,405
EVALUATING THE COST IMPACT OF TRANSITIONING TO ICD-10

(Blanchette, 2015). After staff education and training cost, small providers will be impacted with cost related to Business Process Analysis. The increased specificity demanded in the ICD-10 mandate will cost health care providers $6,905 to improve business process on health plan contracts, coverage determination, and documentation (Kyle Murphy, 2015). The third area that will be impacted by the cost of the ICD-10 mandate is superbill changes. Surveys show small practices will incur a cost of $2,985 to change documents provided to health plans that specify medical services provided. An ICD-10 mandate would require significant changes to existing superbill and perhaps force some practices to move to an electronic medical record system (Blanchette, 2015). Studies show information technology system changes are needed to adopt the new medical code set (Blanchette, 2015). Studies show small physician practices will be required to incorporate the ICD-10 changes into any information technology system. Surveys estimates the IT costs related to the ICD-10-CM mandate would cost a small healthcare provide around $7500 (Janiszewski, 2015). The cost impact to implement ICD-10, show an increase of $44,000 to expand the provider’s ability to add documentation to the patient medical record (Kyle Murphy, 2015). Studies show that providers will experience cash flow disruptions with a change to ICD-10-CM, to the sum of about $19,500 for a small practice. Despite the small healthcare provider’s arguments against the ICD-10-CM transition, the federal mandate placed on all HIPAA covered healthcare providers will be required to implement ICD-10-CM if reimbursement for services is expected. The final stage in Lewin’s change theory explains how the federal government was the most important piece in the refreezing stage of change.
REFREEZING STAGE OF CHANGE

The refreezing stage of Lewin’s change theory is the stage that requires total adoption of the change (Stichler, 2011). The federal mandate requiring healthcare providers to transition to the new medical code set, ICD-10-CM, is the action of the federal government to ensure providers implemented ICD-10-CM by the compliance date set by the government. The compliance date is identified as being the start of the refreezing stage in the ICD-10-CM transition. The Department of Health and Human Services established a date for all healthcare providers to have actually adopted and integrated the new medical code set. If small healthcare providers expect to be reimbursed for services rendered, they will be expected to submit claims, using the ICD-10-CM medical code set. The refreezing stage is critical in the transition because, the refreezing stage prevents providers from utilizing the old medical code set, ICD-9-CM. The transition to ICD-10-CM was a federal mandate. The Department of Health and Human Services issued final rule on January 16, 2009 that mandated the use of ICD-10 codes by all HIPAA covered entities by October 1, 2013 (Office, 2015). The debates between the driving force, the health information management professional, and the restraining force, the small health care provider, earned the transition a 2-year delay. The HHS initially issued a final rule that delayed the effective date until October 1, 2014. The HHS delayed the implementation of ICD-10 because the research showed restraining forces were not prepared to implement the new medical code set by the established compliance date (Green, 2014). In the final stage of the change process, the refreezing stage is demonstrated by the HHS by giving the restraining forces time to establish the supporting systems to run the new medical code set. The research for this project found, the Department of Health and Human Services gave the health care provider another delay in implementing the new medical code set when the Protecting Access to Medicare
Act of 2014, enacted April 1, 2014, mandated an additional delay by disallowing the Department of Health and Human Services from requiring the use of ICD-10 codes sooner than October 1, 2015 (Office, 2015). This move in the final stage of change allowed small healthcare providers more time to implement changes to their current business process and adapt to the new medical code set.

**REVIEW OF LITERATURE**

The literature for research on the subject about the International Classification of Diseases is enormous. The International Classification of Disease is a topic that has been around for centuries. The sources most useful in examining the literature about the history of the International Classification of Disease were the World Health Organization’s website of published articles. The article published in April of 2013, titled “ICD-9 to ICD-10: Evolution, Revolution, and Current Debates in the United States”, published in the Perspectives in Health Information Management journal, authored by Topaz, Maxim provided an overview of the development of ICD. Articles discussing the historical perspective of ICD are important to understanding how ICD evolved into a worldwide disease classification system that continues to be relevant to the healthcare system today. An article from the online research journal, “Perspectives in Health Information Management”, discusses in detail the history, and evolution of the ICD system. The historical value of the International Classification of Disease is available on many other healthcare related sites. The Center of Medicaid and Medicare’s online website publishes many articles that address the historical significance of the International Classification of Diseases. On the topic of International Classification of Diseases, the Centers for Medicare and Medicaid Services listed over 140,000 results on the topic. The History of ICD-9-CM by Pat Brooks, RHIA, a Senior Technical Advisor for the Centers for Medicare and Medicaid
Services presented a report that included information about the history of ICD-9-CM, the World Health Organization, and the history behind ICD-10-CM. The American Health Information Management Association is a source of information related to the current topic about the American healthcare system transitioning to the new medical code set, ICD-10-CM. The Journal of American Health Information Management Association publishes articles about a variety of topics on the International Classification of Diseases. Mary Butler, Author of “After ICD-10: How the Healthcare World Will Change after ICD-10s Implementation” article was published in June of 2015. Butler’s article addressed issues related to the final stage of Lewin’s theory of change relevant to the ICD-10 transition. Butler’s article discusses many of the cost concerns small healthcare providers were debating during the first stages of change. “Cost of Converting Small Physician Practices to ICD-10 Much Lower than Reported”, an article authored by Thomas C. Kravis, MD was similar to literature researched to support the driving force for adopting the new medical code set. An article published in the Journal of AHIMA, titled “Leading Your Facility through the ICD-10 Delay Storm”, written by Horn, Kelli, and published in October of 2014 was similar to researched articles addressing the transitioning stage of change. Kelli Horn’s article addressed the stage of change known in Lewin’s theory of change, as the stage of transition. During this stage, organizations are continuing to utilize the old medical code set, while the driving force for change are working collaboratively with the restraining force to ensure the change occurs and is a sustainable change. The literature reviewed for the research of this project came from a database of archived articles from the driving force of the change, the American Health Information Management Association, the restraining force against the change, the small healthcare provider associations, and the Department of Health and Human Services, the force responsible for ensuring the refreezing
stage of change is maintained and sustained after the transition is completed. The transition from ICD-9-CM to ICD-10-CM is such an enormous undertaking for the United States healthcare system, the literature available for research is generous in many topic areas related to health information management. The enormous amount of literature available on the topic of ICD is most likely duplicated by other professionals interested in the impact the new medical code set will have on their particular sector in healthcare. The body of knowledge on the topic of the ICD-10 transition is well researched between organizational sources like, the Center for Medicaid and Medicare Services, the American Health Information Management Association, and the World Health Organization, and many other stakeholders. This massive collection of literature limits the amount of any original studies on the topic of ICD unlikely, so to create a method for organizing the literature research for discussing the cost impact of transitioning to ICD-10-CM, Lewin’s theory of change was used as the theory to frame this discussion.

OUTCOMES

The results of many of the reports studied about the cost impact of the mandatory adoption of the new medical code set on small healthcare providers show provider readiness to implement the new medical code set as being the result of the cost impact. Studies show small healthcare provider organizations have completed many steps in the implementation process, but still lag in testing (Janiszewski, 2015). Studies show a significant preparedness gap exists among providers, with larger organizations being much further along in their preparation than smaller organizations (Janiszewski, 2015). Small healthcare providers are beginning to see the value of ICD-10-CM, but concerns still linger about decreased revenue, productivity, and coding
A survey of small physician offices shares results of ICD-10 implementation cost. Karen Blanchett, MBA, Richard Averill, MS, and Susan Bowman, MJ, RHIA, CCS surveyed over 200 small physician offices under the Professional Association of Health Care Office Management (PAHCOM). The PAHCOM is the association for managers of physician practices (Blanchette, 2015). The survey showed results of ICD-10 implementation cost that small physicians are actually incurring (Blanchette, 2015). This survey is a direct survey of small healthcare providers which focused on those with six or fewer physicians (Blanchette, February 2015). The results of the survey showed increased cost in ICD-related expenditures in small physician offices (Blanchette, 2015). The study looked at the cost of ICD-10 manuals and documentation, ICD-10 training cost, the cost of business process conversion, and software system upgrades, and testing (Janiszewski, 2015). The outcome of the survey shows small health care providers will be impacted by implementing the new medical code set, the expenditures related to the new medical code set increase as the size of the practice increases, but larger providers see a decrease in expenditures as the size of the practice increases (Janiszewski, 2015). This survey found that the average ICD-10-related expenditures for a physician practice with six or fewer providers is $8,167, with average expenditures per provider of $3,430 (Janiszewski, 2015). These results represent the most comprehensive and current data on the ICD-10 implementation costs actually being incurred in small physician practices (Janiszewski, 2015). Based on this survey, the cost impact to implement ICD-10 is significantly less than originally projected.
CONCLUSION

The International Classification of Diseases will forever be entwined with the US healthcare system. The evolution of healthcare technology and the government’s push for healthcare reform persists. The increased desire for specificity in health information will continue as the U.S. looks to enhance health outcomes and advance the overall quality of healthcare (Sanders & Jones, 2012). Challenges are noted in the areas of planning and implementation, and the financial impact of the transition to small health care providers includes substantial implementation and conversion costs (Sanders & Jones, 2012). The healthcare environment is continuously changing and evolving. The studies show the transition to the new medical code set may have challenges at first for providers, and other healthcare organizations related to system changes, training and education, productivity losses, and business process conversions, but over time small health care providers will start to see improvements. The new medical code set implementation will require the help of the health information management professionals because they play a significant role in transitioning to the new medical code set. The transition will impact different operational aspects of healthcare practices, but the studies show providers will have to incur increased operational costs if they expect to practice under HIPAA laws and regulations.
References

Results retrieved from http://bok.ahima.org/doc?oid=300936


Carl, N. (2014). DHHS final rule on ICD-10 delay ready for publication. retrieved from Journal. AHIMA.org


Green, L. (2014). National Committee on Vital and Health Statistic. Retrieved from


