THE FREQUENCY AND FUNCTION OF PASSIVE VOICE USE IN NURSES' NOTES

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TABLE OF CONTENTS

Page

ABSTRACT

Health care providers of all professions depend on written information to communicate with those not co-present during various phases of patient care, thus making communications about patients of key importance to understanding what sorts of discourses are prevalent and valued in hospitals. While physicians' written discourse has enjoyed some attention, there has been very little research done on written nursing discourse, a critical component of patient care, from the perspective of organizational communication. For this pilot study of nurses' written communications, I examined 34 nurses' patient progress notes from computer-based in-patient records obtained from a local regional medical center. Because extensive use of the passive voice is a defining characteristic of medical discourse, I chose to focus my discourse analysis of nurses' notes on the frequency and function of its use.

Furthermore, an analysis of passive voice use is salient because the passive voice has for so long been an object of hotly contested debate in the fields of English composition and technical and organizational communications. Of 335 transitive verb phrases, with human agents, in the notes, I found that 48.96% were in the passive voice. Of the passive verbs, 85.98% of them refer to actions performed by the nurse writing the note, only 2.74% of them refer to patients' actions, and 10.37% of them refer to actions performed by other hospital personnel. The passive voice appears to serve the rhetorical function of deferring attention away from the agent, the nurse, and towards the patient or the materials being used to treat the patient, much as it is used in scientific writing. However, I also found that the passive voice is sometimes used inconsistently, and its use varies from nurse to nurse, even within the same unit. It is my hope that this pilot study, having revealed the inconsistency and complexity of passive voice use in

nurses' notes, will lead to more, comprehensive studies of writing in the nursing discourse community.

ACKNOWLEDGEMENTS

I would like to acknowledge the RNs in the medical-surgical unit of the regional medical center who volunteered their time to participate in this study. Thanks also to the clinical research officer, IRB compliance coordinator, and the individual in technical support who de-identified the data set and demonstrated the hospital's computer-based patient records.

I would also like to recognize the contribution of my mom, Tana Porter, who has been a nursing instructor and practicing nurse for over 30 years. She inspired me to do this project and kept me honest throughout. Without her insider knowledge of nursing education and practice, I never could have understood, interpreted, or analyzed nurses' notes.

Finally, I would like thank Dr. Colleen Reilly who helped me tackle the confusing world of Institutional Review Boards. More importantly, Dr. Reilly introduced me to the fulfilling and fascinating fields of technical and organizational communications. Her encouragement and support for my professional development have far exceeded her responsibilities as a thesis advisor.

DEDICATION

I would like to dedicate this to my parents: my Dad, who gave me my love for knowledge and the sciences and who taught me to question everything and my Mom, who always corrected my grammar and punctuation, and, without whom, I would not have been able to complete this project.

LIST OF TABLES

INTRODUCTION

Overview

Health care providers of all professions depend on written information to communicate with those not co-present during various phases of patient care, thus making communications about patients of key importance to understanding what sorts of discourses are prevalent and valued in the health care community. Pamela Hobbs's recent study of evidentiality in a physician's writing provides interesting insights into the physician's use of constructions, such as the passive voice, to increase the credibility and objectivity of his patient notes. Besides Hobbs's, several other studies have been performed on medical discourse, including Catherine Johnson Pettinari's *Task, Talk, and Text in the Operating Room: A Study in Medical Discourse* and a collection of articles in *Talk, Work and Institutional Order: Discourse in Medical, Mediation and Management Settings*, edited by Srikant Sarangi and Celia Roberts. However, aside from Jennie Dauterman's comprehensive study of oral communication and negotiated composition in the nursing discourse community in *Writing at Good Hope: A Study of Negotiated Composition in a Community of Nurses*, there has been very little research done on written nursing discourse from the perspective of organizational communication.

Because extensive use of the passive voice is a defining characteristic of medical documentation, I chose to focus my discourse analysis of nurses' notes on the frequency and function of its use. Furthermore, an analysis of passive voice use is salient because the passive voice has for so long been an object of hotly contested debate in the fields of English composition and technical and organizational communications. The persistent use of the passive

voice in workplace writing, despite its continued criticism in academia, may be a symptom of the academy-practice disconnect.

According to Geoffrey W. Martin and Gordon Mitchell, the academy-practice disconnect or, as they refer to it, the "theory-practice gap" (27), is as an important topic of concern in nursing as it is in technical and organizational communications. M. L. Brereton indicates that the idealism of classroom teaching continues to reinforce the theory-practice gap. Because health care and health care providers are under constant public and political scrutiny, it is important that the health care professions continue to improve practices through research and the application of theory. Conversely, health care providers entering the workforce must be properly prepared and ready to meet the ever-increasing demands of their jobs, and one of the most overlooked but critically important skills demanded of health care providers is good writing skills.

For this pilot study of nurses' written communications, I examined a sample of nurses' patient assessment notes from in-patient records obtained from a local regional medical center. Through discourse analysis, I examined these documents to determine the frequency and context of passive voice use, with the intention to determine some of the functions the passive voice serves in nurses' notes. After completing the textual analysis, I devised a brief survey through which I hoped to gain some qualitative data that might provide a better understanding of passive voice use in nurses' notes from individual and social perspectives (Faigley). Specifically, my survey was designed to collect data about the educational and career backgrounds of the participating registered nurses (RNs) and their formal and on-the-job writing education. The survey also included a section asking the participants to write notations in response to situations they might encounter on the job. The final, and perhaps most revealing section of the survey, allowed me to compare the participants' actual writing to their stated preferences by requiring

them to choose between a passive phrase and its active equivalent for ten sets of notations commonly found in the notes I analyzed. Keith Riggle used a similar method as part of his study into the on-the-job writing practices of military and civilian employees on an Air Force base.

The results of my textual analysis and survey have revealed both pervasive and inconsistent use of the passive voice in nurses' notes, which has led me to conclude that more research into nurses' writing practices needs to be performed. While Dauterman notes that the nursing profession is beginning to acknowledge the importance of academic writing to "emerging professionalism" (49), the literature in the nursing community about on-the-job writing is concerned primarily with the content of documents, such as notes. There seems to be minimal concern for, or, perhaps more accurately, understanding of, grammar or syntax in nurses' on-the-job writing. Through what amounts to an oversight on the part of the academy and the nursing community, nurses' on-the-job writing, a critical component of patient care, has been neglected for far too long.

Statement of the Problem

On the surface, nurses' notes written in a hospital setting may appear similar to physicians' notes. Patient progress notes written by all health care team members follow similar formats, the most common of which are SOAP (subjective, objective, assessment, and plan) and PIE (problem, intervention, and evaluation) (Potter and Perry 506-7). However, nurses' responsibilities and concerns regarding patient care are obviously different from physicians', and this fact presents unique communication problems, problems that can be explored through a discourse analysis of nurses' notes.

Nurses, as opposed to physicians, are charged with the immediate physical and psychological needs of their patients while they are under their care. Physicians' diagnose a patient's illness and then formulate an ongoing treatment plan. Their notes, therefore, reflect a focus on the patient's continual, rather than immediate, needs and any future observations and interventions that will be necessary to alleviate the illness or infirmity. For example, Hobbs analyzed a pediatric resident's note of his assessment of an infant with possible seizures. A nurse called the resident after she observed what looked like seizure activity. The physician's note is in SOAP format, and the assessment and plan portion of the note have been combined, which is not an uncommon practice. The content of the A/P (assessment/plan) section gives information to a reader about long term patient care:

> A/P: These movements need to be followed very closely and investigated in case of persistence. For now lytes and Ca, MG, PO4 will be done to rule out abnormalities. In case of persistence of the problem CNS need then to be investigated for possible injury or bleed. (Hobbs 464)

However, the assessment and plan portion of an example nurse's note written in the same format from Patricia Potter and Anne Griffin Perry's *Nursing Fundamentals* appears as follows:

> A—Knowledge deficit regarding surgery related to inexperience. Client also expressing anxiety.
>
> P—Explain routine preoperative preparation. Demonstrate and explain rationale for TCDB exercises. Provide explanation and teaching booklet on postoperative nursing care. (507)

A comparison of the two notes clearly shows a different temporal concern and a different degree of responsibility: the physician's plan is concerned with long term, hopefully curative, care that

may be carried out by other health care providers, and the nurse's plan is to personally take an action that will result in the alleviation of the patient's immediate problem.

Aside from its important role in patient care, nurses' written communications present an interesting study into the effects of gender imbalance and hospital hierarchy on discourse. Dauterman noted that power differences between the different discourse communities within a hospital are well defined and rigidly controlled through an enforced hospital hierarchy, on-the-job training, and education (17). In addition, according to the Department of Labor, women held approximately 90% of registered nursing positions in 2003, making nursing one of only a handful of occupations with a similarly significant gender imbalance. I believe that the characteristics that differentiate nurses and the nursing profession from physicians, including the training, nurses' responsibilities and concerns regarding patient care, a significant gender imbalance, the strictly enforced power structure that exists within hospitals and other healthcare facilities, make nurses' on-the-job writing quite different from physicians'. Therefore, nurses' written discourse should be examined as both distinct from and a valuable part of the larger medical discourse community.

One of the defining characteristics of the most common form of nurses' written discourse, nurses' patient progress notes, specifically, and all medical notation in general, is pervasive use of the passive voice (Anspach 363; Hobbs 465). According to Hobbs, passive voice use in medical notation acts as a marker identifying and qualifying information obtained from hospital personnel other than the author, who is frequently a nurse or nurse's aid. Hobbs notes that this use of the passive voice is "similar to that found in academic papers" (465). Because nurses' responsibilities are different from physicians', their use of the passive voice may

also be different and may reveal ways in which nurses' on-the-job writing can be improved through formal education.

According to Jane Terese Brooks, the nursing discourse community has a predominantly oral culture; the focus on oral communications in nursing has been at the expense of writing skills (190). Brooks's article, "An Analysis of Nursing Documentation as a Reflection of Actual Nurse Work," draws attention to nurses' poor overall writing skills in contrast to their far superior verbal skills. Brooks found that, although nurses acknowledge the importance of documentation, "most expressed a certain hopelessness and futility about the utility of nurses' notes" (194). Marilyn Frank-Strombourg suggests that "Sometimes, nurses are so accustomed to typing or computer charting that they have trouble writing" (699). However, Frank-Strombourg concludes that an oral culture, futility, and computer charting are not valid excuses for poor documentation, but, rather, signs that nurses must try to improve the overall written communication skills of the whole profession (699).

I believe individuals in the fields of English composition and organizational communications also share some of the responsibility for helping to improve written communications in the nursing discourse community. The purpose of this pilot study into nurses' on-the-job writing is not only to discover how nurses use the passive voice in their notes or how their notes differ from physicians'. The purpose of this study is to encourage further research on nurses' written communications to help bridge the academy-practice disconnect, assist the nursing discourse community to improve documentation practices, and learn more about improving all workplace communications through the application of theory.

Literature Review

The Passive Voice Confusion

In her article, "Jargon and the Passive Voice: Prescriptions and Proscriptions for Scientific Writing," A. M. Wilkinson admonishes critics of scientific writing who "prescribe remedies, based on fundamental principles of writing that are presumed to be universal" (319). She recognizes that writing theories and techniques, which apply readily to writing in English classrooms, cannot be applied, without qualifications, to scientific writing. I will go one step further and say that what Wilkinson finds true for scientific writing is also true for many other kinds of writing, including legal, medical, and, in general, any on-the-job writing (Riggle).

Passive voice defense has been a notable topic of research in technical communications for the past decade, particularly in *The Journal of Technical Writing and Communication.* The variety of disciplines covered in these articles support the fact that no blanket prohibition or rule for using the passive voice can exist. The problem with passive voice critics is, as Wilkinson notes, they are often ignorant or, at least, uninitiated to the peculiar social and rhetorical needs of the disciplines they are criticizing. What student cannot remember her English teachers' passive voice admonishments, passive sentences marked in red on her papers, and those squiggly, green calling cards of the Microsoft grammar police under every wicked sentence?

Despite what Microsoft, English teachers, and writing handbooks say, the passive voice is not all bad, but the confusion and mixed signals students receive about its use can be. What should be obvious is that not all writing is the same, and writing to communicate within different disciplines or discourse communities is not simply a matter of knowing what one wants to write and setting fingers to keyboard. Each word, the syntax, the voice, and the point-of-view in a

document should be the result of discursive choices made after careful and considerate rhetorical analysis. The passive voice confusion is, in many ways, a symptom of the academy-practice disconnect that is currently the most important topic of concern in technical and organizational communications. A careful examination of the diverse and discipline specific applications of the passive voice analyzed in several technical communications articles from the past decade shows passive voice as more than a stylistic choice; it is a context and discipline specific rhetorical device that cannot be evaluated separately from the disciplines whose social values it embodies.

Ignorance of the reasons behind certain discursive choices, like all forms of ignorance, is dangerous. According to Hobbs, when writing patient progress notes, physicians in a hospital use the passive voice in their evidentiary writing to identify the sources of information and the way they obtained the information. For the sake of expediency and because the object or focus of progress notes is always the patient, physicians and nurses often omit pronouns and other nominative phrases, in general, which could lead to confusion without the evidentiary function of the passive voice (Hobbs). The shared assumptions of health care providers in a hospital discourse community lead them to translate the use of the agentless passive as information from another health care provider and an active sentence as information obtained from the patient or an action committed by the patient.

Tana Porter, who has been both a nursing instructor and practicing nurse for the last 30 years, demonstrated the importance of using the passive voice properly with the following truncated sentences describing the disconnection of an intravenous line (IV):

(1) Disconnected IV.

(2) IV disconnected.

The first sentence is in active voice and the second is passive. Now, the complete versions of each of these sentences could read:

(1) I disconnected the IV. or The Patient disconnected the IV.

(2) The IV was disconnected by me. or The IV was disconnected by the patient.

Only knowledge of the discursive choices made within a hospital community tells a nurse or physician that "Disconnected IV" means the patient did the disconnecting and that "IV disconnected" means the nurse or physician writing the note did the disconnecting. This example raises important questions, like why do these sentences mean what they do within communities of health care providers, and how do community members know and is this use of the passive voice consistent? An even more important question is how are nurses and physicians initiated into this privileged knowledge? Do health care workers know why the passive voice is employed in some situations and not in others? Or, is pervasive passive voice use a product of *habitus*, as defined by Pierre Bourdieu?

In *Analyzing Everyday Texts*, Glenn F. Stillar applies habitus to the composition of non-academic, or workplace, writing:

> The sheer substantiality, the materiality of text and context—from the intonation contours of our sarcastic tones to 'gut' feelings about who gets to speak fist around the dinner table—constitute, as habitus, a knowledge without concepts. Conditions and consequences may not be explicitly acknowledged or intended, but we nevertheless feel and act on them accordingly. (195)

If, in fact, health care workers and other professionals who frequently use the passive voice do not do so knowingly, habitus would prove to be a viable explanation for this common attribute of written medical discourse. However, as long as practitioners use the passive voice when it is

appropriate and necessary, does it matter that they know what its function is? I believe it is important that practitioners in all disciplines understand why they write the way they do, so they understand the potentially powerful effects of their discursive choices and can even make changes to standard practices rather than just following the status quo.

The choice of the active versus passive voice is one of the most powerful choices a writer can make, and, therefore, abuse of the passive voice can occur when writers are unaware of the ways passive voice can change perceptions of personal responsibility and cause psychological distancing. Gerd Bohner, Nancy M. Henley, and Michelle Miller have all studied the negative effects of the passive voice in descriptions of sexual violence. Bohner's study of individuals' perceptions of responsibility in rape cases led him to the discovery that individuals writing a description of a rape act will use the passive voice more frequently than the active. Evidence from R. R. Kameny and D. J. Bearison's study on the use of the passive voice in personal narratives by children with cancer would seem to suggest that use of the passive voice may be, at least partially, an attempt by individuals to psychologically distance themselves from emotionally disturbing events or situations they are having trouble accepting. More disturbing is Bohner's report that the volunteers in his study used the passive voice most frequently to describe rapes that could be easily interpreted in terms of rape myths, and, therefore, the passive voice correlated in some cases to perceived responsibility of the victim (528).

Henley and Miller also found that the passive voice is frequently used to describe rape. They argue that, whether it is done intentionally or unintentionally, the media's use of the passive in reporting violent crimes against women causes readers to be more accepting of the violence and perceive less responsibility on the part of the perpetrator. I would like to think that most of the professional and non-professional writers in Bohner's and Henley and Miller’s studies did not

consciously intend to represent rape perpetrators as less guilty or the victims as guilty, but, rather, used the passive voice unintentionally, ignorant of the damaging choices they made.

The extreme instances of passive voice abuse Henley and Miller and Bohner document are the kinds of unusual circumstances that cause critics to declare a blanket prohibition against the passive voice. One particularly strident opposition to the passive voice can be found in Sheridan Baker's *The Practical Stylist*—the passive voice section is entitled "Shun the passive voice." Baker writes, "The passive voice is more wordy and deadly than most people imagine, or it would not be so persistent. [. . .]. The passive voice liquidates and buries the active individual, along with most of the awful truth" (112-3). William Strunk and E. B. White also recommend against the passive voice, albeit with less venom than Baker does: "The active voice is usually more direct and vigorous than the passive" (18). Interestingly, both Baker and Strunk and White eventually concede that the passive voice is sometimes necessary; however, they do so reluctantly and as an afterthought, which seems to be buried under all the prohibitions.

According to Brady Coleman, some legal writing books are as guilty of prescribing against the passive voice as English handbooks. Legal writing critics' condemnations of the passive voice, Coleman says, include the belief that "darker motives lurk behind the passive's misuse" (193). Other criticisms of the passive voice in legal writing are that it hides the identities of the guilty and intentionally obscures the truth (Coleman). However, intentional misuse of the passive voice is the exception not the rule in most writing, but this criticism does emphasize, once again, the importance of understanding why certain discursive choices should and should not be made, to prevent the kinds of unethical obfuscations legal writing critics are condemning.

Coleman's observations aside, most of the passive voice confusion and criticism is directed at scientific writing. In her article "Getting Personal: Individuality, Innovation, and Technical Communication," Carol Steiner discusses the need to teach scientists, engineers, and technologists better communication skills because of the difficulty they have communicating with people outside their disciplines. According to Wilkinson, extensive use of the passive voice and jargon are the two most frequently mentioned discursive practices in scientific writing that cause the communication gap Steiner discusses. Jargon is specialized language that results from the need for precision and accuracy in scientific and technical disciplines; it is alienating but also necessary. The functions of the passive voice in the discursive practices of scientific and technical disciplines, however, are more frequently misunderstood and harder to explain than the use of jargon; passive voice confusion is the result.

Undoubtedly, critics' biggest objection to passive voice use in scientific writing is that scientists use the passive voice to present themselves as objective. Wilkinson writes, "Critics see this objectivity as presuming to an Olympian detachment" (322). She is quick to point out that scientists' use of the passive voice is not to appear more objective but to be more "object-oriented," which is only logical considering the focuses of their discourse are objects: "organisms, materials, methods, findings, analyses, controls, etc." (322).

The prescription critics give for the passive voice is to provide an agent, which would require scientists to add a lot of "I's." Wilkinson revises a passage from the Methods section of a scientific paper to demonstrate the absurdity of this prescription:

> *I* placed cells in a thin chamber . . . consisting of and held together with vacuum grease. *I* siliconized the coverslip to. . . . *I* placed the chamber on the stage of an inverted . . . microscope. *I* formed a glass micropipette by. . . , and *I* inserted it

> into the chamber thought. . . . *I* connected the pipette to a waterfilled reservoir, the height of which I could adjust. . . . *I* controlled the pressure inside the pipette by. . . . *I* determined zero pressure . . . by stopping the motion of cells . . . . (323)

Not only is this passage redundant and grating to read (imagine an entire scholarly journal full of this kind of writing); it also causes the focus to shift from its logical subjects, the objects, to the scientist.

By prescribing use of the first person for scientific writing, critics are asking scientists to commit an act of egoism akin to the Olympian detachment they accuse scientists of presuming to when they use the passive voice. Perhaps the most interesting misunderstanding Wilkinson sees between scientists and their critics is that "scientists think of their research as 'truth'" and use of the first person singular would qualify that "truth" (324). Nothing could be further from the truth. The only thing that most scientists consider objective or "true" is the existence of the object or objects they are studying, not their opinions or observations about those objects, which scientists will readily admit change frequently—today's scientific fact is tomorrow's crackpot superstition.

As I mentioned earlier, even passive voice critics, like Baker and Strunk and White, begrudgingly admit use of the passive voice is sometimes grammatically and stylistically unavoidable. In fact, when critics are making proscriptions against it, they often forget that some sentences can only be written in the passive voice. Necessity and style are the first two reasons Coleman cites for using the passive voice. According to Coleman, some verbs are nearly always passive, like in the example:

(1) Sally was raised in Arizona.

Making this sentence active would also make it unnecessarily wordy and ambiguous:

(2) Sally's parents raised her in Arizona.

What if Sally was raised by her grandparents or just her dad? The "her" could also refer to someone else other than Sally (Coleman 195). Likewise, Coleman notes on pages 195 and 196 that it is confusing and inaccurate to substitute an indefinite noun or pronoun for the subject of a sentence simply to avoid using the passive form, like in the sentences:

(1) The toilet is occupied.

compared to

(2) Someone occupies the toilet.

What if something or several people or things occupy the toilet?

Lilita Rodman gives yet another stylistic reason for choosing the passive voice over the active voice (or vice versa), the principle of end-weight, which specifies that long noun phrases go at the end of sentences (312). We often follow this principle in passive formations to keep an agent with several modifiers closer to the verb, for example:

(1) The rain was caused by a low-pressure system sweeping in from the northwest mixing with another from the east.

The first sentence is preferable to:

(2) A low-pressure system sweeping in from the northwest mixing with another from the east caused the rain.

I have only touched on some of the more important necessary and stylistic reasons for using the passive voice; Coleman lists several more that can be readily understood and applied by critics and writers in all disciplines, and, therefore, these principles, although frequently marginalized, are not the primary cause of the passive voice confusion. The passive voice confusion is caused by critics' ignorance of the rhetorical goals and social or sociopolitical

structures that necessitate use of the passive voice, which only individuals who understand the needs and practices of a particular discipline or discourse community can understand.

The Academy-Practice Disconnect

Anthony Paré warns that some of the most important academic writing proscriptions "could be disastrous if followed in the workplace" (64), including shunning the passive voice. To identify the integral role of the passive voice in workplace writing as a means both to understanding its practical purposes—the real reasons writers use it—and the values it represents in non-academic discourse, Riggle determined the frequencies of active and passive verbs in 185 documents written by military and civilian personnel in administrative positions on an Air Force base. He also asked the writers why they chose the voice they did and the most important factors were "the voice of the verb, organizational requirements, audience awareness, efficiency, genre, euphony, personal preference, agency, emphasis, and topic-comment flow" (85). Some of the factors are obviously stylistic, but organizational requirements, audience awareness, and personal preference are inseparable from context. Not only do these factors demonstrate how impossible it is for someone outside a discipline to understand the choices a writer makes, but also these factors are specific to individual businesses and each individual writing situation.

Riggle's research drives home the point that writing theory cannot anticipate writing practice and only more research into the actual practices of workplace writers can ever hope to create any practicable theories or classroom pedagogies. However, workplace writing has been and continues to be one of the most popular areas of study in technical and organizational communications, and yet, according to Paré, very little has changed in the classroom or the

workplace. Paré's gloomy observation only means that we must continue to do more research, focusing on long-term changes and solutions. It is evident that jumping to quick conclusions about workplace practices is futile and can do more harm than good to already strained academy–practice relations.

One would think that the sciences would not experience an academy-practice disconnect as acutely as business and industry because so much scientific research is conducted within universities, but the disconnect scientists and other "technical people" (Steiner 389) suffer is even larger; it is between them and the rest of world. While the scientific and technical communities are perhaps not as workplace specific in their discursive practices, each particular branch (i.e. physics, biology, chemistry, electrical engineering, etc.) has its own disciplinary matrix through which members are indoctrinated into the social values of their disciplines (Kuhn). The major branches of science and engineering then have incalculable numbers of specialized fields, each with its own peculiar discourse.

Scientists' very specialized knowledge is both the source and the result of the exclusionary jargon they use to describe accurately and precisely their data and observations. Likewise, their focus and aim to be objective or object-oriented (Wilkinson) is both the cause and result of their extensive use of the passive voice. Katheryn Riley's thorough examination of the passive voice and active voice in twelve speech-language pathology articles reveal that the highest instances of the passive voice occur, on average, in the Methods (55.5%) and Results (32.9%) sections of the articles because these sections are primarily expository and object-oriented (246). According to Riley, this information corroborates with earlier studies; however, some scientific disciplines may demonstrate a different percentage of passive structures. Rodman found that in sixteen articles in the physical sciences the rate of passives in the Methods

was 88%, and the overall percentage of passive verbs was 66% (309). The significantly higher rate in Rodman's findings can easily be accounted for by considering the primary focus of study in the disparate sciences of speech pathology and physics. Simply stated, speech pathologists have one “object of study” to focus on and write about, the patient; whereas, chemists and physicists have many objects to focus on in their experiments and writing.

Overall, the fewest passive structures occur in the Introduction (23.8%) and Discussion (16.1%) sections because they are the most argumentative and the sections in which the first person is used most frequently (Riley 246). I think Charles Bazerman's explanation of scientists' use of the first person point-of-view neatly elucidates the distribution of passive voice in Riley's findings: "None of the first-person uses imply inconstancy in the object studied, but only changes or development of the author's beliefs of what the appropriate claims about the object should be" (31). In the Methods and Results sections, the objects are the focus of the discourse; they are like the Sun, and the scientists' opinions in the Introduction and Discussion sections are like the planets revolving around it, with constantly changing perspectives. The passive voice in scientific writing, therefore, is not used to make the scientists appear more objective only the objects and the actions they perform while studying them.

Scientists' knowledge of their subjectivity, in most cases, does not prevent them from aiming for objectivity. Even if like Sisyphus they can never succeed, they continue their uphill struggle. The pursuit of "truth" is the foundation of scientists' values and their discursive practices. Daniel Ding defends the use of the passive voice in scientific writing based on the social values of "falsifiability of science and cooperation among scientists" that are embodied in its use (137). He defines falsifiability as the requirement that "new theories be amenable to being tested and found invalid" (138). In this function, the passive voice acts to separate the

performer of the original experiment from the materials and actions of the experiment. Critics, who think that changing the Methods section of a scientific experiment to the first person singular would be a feasible prescription for eliminating the passive voice, do not realize the power of language to affect the way readers perceive information. The first person singular would influence a reader, making the experiment seem like a peculiar event, not a verifiable and repeatable one.

As Ding notes, scientific cooperation does not suggest a big, happy commune of scientists working together for the greater good; scientists are acutely aware of the competitive nature of their disciplines. When Ding suggests that the passive voice is used to "manifest cooperation" (150), he is recognizing the dependency scientists have on the research and theories of other scientists who have come before and are contemporary with them. This cooperative information network is composed of scientific jargon and the objects of scientific inquiry. Ding's social value of scientific cooperation stems from the use of the passive voice in keeping research methods object-oriented as Riley demonstrated. In light of Ding's definition of scientific cooperation, perhaps a model of scientific discourse would show a continuum where the scientists' perceptions about their objects of study move sometimes further, sometimes closer to the objects themselves while the objects remain objectively pinned down by the passive voice.

Bazerman warns literary scholars who may wish to study non-literary texts "that quick generalizations drawn from literary theory cover the ground only in the sense of hiding it" (15). Perhaps in no issue is his warning felt more acutely than in the passive voice confusion. The passive voice articles I have discussed demonstrate the dangers of generalizing about non-literary texts. Take, for instance, the comparison between the distributions of passives in Riley's article about speech pathologists versus that in Rodman's article about physicists. If I examined passive

voice frequency in texts from 50 different disciplines, I would get 50 different results because, despite similarities in stylistic uses of the passive voice, its rhetorical and social functions are always context-dependent and cannot be taught in a classroom, generalized about, or ignored.

METHODS

Research Questions

Through my research, I sought to answer the following questions about nurses' processes of composition, in general, and passive voice use, specifically:

(1) What is the frequency and context of the passive voice in nurses' patient progress notes, the most common form of nurses' written communications?

(2) What purpose, meaning-making or evidentiary function, does the passive voice appear to serve?

(3) How might temporal condition, responsibility, gender, and nurses' positions within the hospital hierarchy affect their written discourse, particularly use of the passive voice?

(4) Can nurses differentiate between the passive and active voice, therefore, demonstrating whether pervasive passive voice use is an act of volition or the product of habitus?

(5) What can be inferred about any observed differences between nursing education regarding report writing strategies and practice through discourse analysis and how can this information be used to benefit the nursing discourse community?

(6) Will further and more extensive research into the writing practices of nurses be feasible and beneficial?

Research Design

My textual analysis was similar to Riggle's analysis of passive voice use by civilian and military Air Force employees. Riggle used "an *ex post facto* descriptive research design" (90), which I also adopted, not wishing to alter or influence the writers' processes of composing on the job. I also used Riggle's criteria for determining what constituted a passive voice verb (91). Like Hobbs, I determined the contexts of passive voice use, so I could ascertain their function. Determining the function of the passive voice in nurses' notes required a sound understanding of current research on the passive voice, its uses in scientific and medical writing, and any linguistic or psycho-linguistic theories or research related to the passive voice.

In "Nonacademic Writing: The Social Perspective," Faigley recognizes that there are three perspectives from which writing can be analyzed: the textual, the individual, and the social (231). Although the overarching method behind my research was discourse analysis, as I analyzed the nurses' notes, I found more questions than answers. The survey portion of the study was added after I discovered inconsistencies in the context of passive voice use, which I will discuss in detail later. Therefore, as recommended by Faigley, I performed both quantitative and qualitative research in order to analyze the frequency and function of the passive voice in nurses' notes from textual, individual, and social perspectives.

The survey I developed asked for the nurses' educational and employment backgrounds and writing samples, so I could determine if any conclusions could be drawn about the relationship between an individual nurse's professional background and passive voice use. In the final section of the survey, I asked the participants to choose between passive voice phrases and

their active equivalents in ten pairs of medical notations. Unfortunately, my qualitative data collection methods were limited to a survey, as interviews could not be scheduled and performed in such a limited period. This shortcoming will need to be addressed in future studies.

Participants

As I mentioned previously, after determining the frequency and function of the passive voice in the nurses' notes, I solicited volunteers, from the same medical-surgical floor from which I obtained the notes, to respond to surveys (see Appendix A). After discussions with both the clinical research officer and the nurse managers, it was suggested that the best way for me to solicit volunteers would be through a presentation given at a nurses' staff meeting. Because the nurses' free time at work was limited to a brief lunch period, the nurse managers suggested that volunteers complete the surveys whenever they had time and then return them to the managers in approximately one week for me to pick up. Clearly, these are not the ideal methods for obtaining qualitative data, but I believe any reluctance I met may have been, at least in part, a result of the medical center staff's unfamiliarity with research from outside the medical discourse community. My research was sometimes perceived as, for lack of a better word, a novelty.

Sixteen RNs from the medical-surgical unit completed the survey. Because of this small sample size and that similar research into nurses' writing practices had never been performed from the perspective of organizational communications, this study was a pilot study. Therefore, I am prefacing any conclusions drawn from the data with the knowledge that further study will be required to make any definitive conclusions about the social functions passive voice serves in nurses' notes and how nurses have learned to use the passive voice in their notes.

I chose to limit the participants to RNs only, so I would not have to account for differences in professional certifications and responsibilities. For example, while still technically a nurse, a nurse practitioner has many of the rights and responsibilities of a physician. Conversely, LPNs do not have the same scope of patient care responsibilities as RNs. While I still recognize that no two RNs would have the same educational and work experience, limiting the participants to RNs limited these types of differences as much as possible.

It was also important that the RNs all work in the same unit of the hospital. The necessity of this restriction is two-fold. First, each unit of the hospital has its own management and set of responsibilities. As this study is not comparative, I did not wish to compare the different responsibilities and procedures required by the RNs in different units. All of the participants worked in a medical-surgical unit, which was important for limiting any variations in emotion, stress, and responsibility that could affect the RNs' composition processes. For example, working in an emergency room can be more stressful, faster paced, and physically more challenging than working on a medical-surgical unit, where patients are recovering from surgery or under medical care. Furthermore, emotional stress could create differences between the way an RN uses the passive voice when writing about children in a pediatric oncology ward or patients in an intensive care ward (Bohner; Kameny and Bearison; Henley and Miller). Patients on a medical-surgical floor come from a more diverse demographic and have the most diverse medical conditions and diagnoses of any patients in the hospital.

The individual identities of the authors of the notes are, of course, unknown. The survey participants are also unknown; however, it may be reasonable to suspect that at least some of the RNs who wrote the notes from the textual analysis also participated in the survey portion of the

study. I did consider it important to gain some information about the educational and employment backgrounds of the survey participants, so that I could determine three things:

(1) If the year the participants graduated from nursing school affected their use of the passive voice

(2) If passive voice is affected by the extent of their formal education (i.e. for this population, whether they received a Bachelor of Science in Nursing [BSN] or an Associate Degree in Nursing [ADN], or in some cases, both)

(3) If passive voice use is affected by their employment history

Considering that, according to Rupert Sheldrake, the passive voice enjoyed its greatest popularity from about 1920 to 1970 (9), it may be reasonable to assume that RNs who graduated in the 1970s or 1980s would make more pervasive use of the passive voice than RNs who have graduated very recently. The average year of graduation for the sixteen RNs participating in the survey was approximately 1999. The participants' average total years of experience in the nursing field, therefore, is 6. However, both of these figures are skewed by the presence of a participant who graduated in 1979 and another who graduated in 1983. A majority of the participants graduated since 2000 and have fewer than 5 years of nursing experience (see Table 1).

Table 1. Highest Nursing Degree Received, Year of Graduation, and Total Years of Nursing Experience by Survey Participant

Participant	Degree	Year Completed	Years Total Experience
1	BSN	2000	4
2	BSN	2004	0.3
3	BSN	2004	0.6
4	BSN	2002	2.5
5	BSN	1995	9
6	ADN	1979	26
7	BSN	1988	17
8	BSN	1993	9
9	ADN	1998	9
10	ADN	2003	4.5
11	BSN	2002	2.5
12	ADN	2000	4.75
13	BSN	2002	3
14	BSN	2004	0.6
15	ADN	2002	2.5
16	ADN	2004	0.6

Ten of the sixteen participants have their BSN. The other six have their ADN and one of those is in the process of receiving a BSN, according to the survey response. Comparative studies of RNs with BSNs versus those with ADNs, have demonstrated that hospitals with a low proportion of BSNs to ADNs may have statistically higher mortality rates than hospitals with a higher proportion of BSNs to ADNs (Aiken, et al.). While the study by Linda H. Aiken, et al., and others like it, appear to be highly controversial in the nursing community, the idea that individuals with more formal education would perform similar duties differently than individuals with less formal education may seem logical. Similarly, I believe that RNs with a four-year degree may have had more formal writing education than those with a two-year degree, which could create differences in writing process and ability.

The final background information I acquired from the participants was their work history; specifically, I asked what kinds of medical organizations or businesses they had worked for in the past. Twelve out of the sixteen participants had never worked as a nurse anywhere other than the regional medical center. The other four had some experience working in home health, rehabilitation, or a private medical practice; although, the majority of all the participants' work experience was at the regional medical center. The stark contrasts between working in a large regional medical center versus a small private medical practice would certainly result in at least some differences in nurses' writing. Therefore, I considered it important to know whether any of the participants had spent the majority of her career working at a small practice rather than the regional medical center.

As with any job, different healthcare facilities will have different policies and procedures regarding documentation practices. The most significant factor affecting both the results of this study and the compositional processes of the nurses, however, is that many large hospitals,

including the one I worked with, have implemented computer-based patient records (CPRs) (see Appendix B). For this reason, more than any other, it is important to know the job history of the participants in this or any similar study. RNs who had recently and for most of their career worked at, for example, a private medical practice, would not be as accustomed to computerized charting as nurses who had always used it or used it for several years. In my conclusion, I will go into greater detail about the possible effects computerized charting may have on the nurses' processes of composition.

Procedures

The Notes

My first research objective was to determine the frequency of passive voice verbs in nurses' notes. The de-identified data set I obtained had 34 blocks, each of which represented a collection of a nurse's annotations from an in-patient record in a medical-surgical unit. All of the annotations were written within a 24-hour period shortly before I received them. Notes written in computer-based patient records (CPRs) have the advantage of being extremely easy to de-identify and obtain. However, they have several disadvantages as subjects of linguistic and composition research when compared to handwritten notes. They are even briefer than traditional notes because each annotation, individual comment within the patient's record, refers to a specific charted field within a very narrow topic. "Wound," "Topics Covered," "Medications," and "Assessment" represent a very small sampling of all possible charted fields (see Appendix B). Because the topic being observed, discussed, or intervened with is

understood, the annotations frequently consist of just one verb or adjective or standardized abbreviation. I frequently had to fill in missing words to make sense of the annotations.

My procedure for determining the frequency of the passive voice in the annotations was similar to that used by Riggle in his analysis, based on Jan Svartvik's scale, where verb phrases can only be counted as passive if they have an active equivalent that would not change the meaning of the phrase (91). Since only transitive verbs can have objects, then, of course, all the verbs counted and sorted according to passive or active voice were transitive. I did not count intransitive verbs at all.

I also limited the verbs I counted as passive or active to only those with human agents. It is not uncommon for the subjects of some passive phrases in medical and scientific writing to be inanimate objects of observation. An example from the notes would be "400cc [of fluid] accumulated." The 400cc of drainage appears to have been accumulated by a tube and/or bag. The object that did the accumulating is not human and, therefore, incapable of the abdication of responsibility or psychological distancing that are the most frequent criticisms of the passive. Furthermore, writing this phrase in the active voice would actually prove more unclear and wordy than the passive: [The] bag accumulated 400cc of fluid.

After I identified the passive and active verb phrases, I organized them by agent and agented or agentless construction. Each block of annotations consisted of anywhere from 0 to 81 transitive verbs because they varied greatly in length, from a couple of lines to several pages long. When a clause had more than one verb, as in the following clause taken from the notes, "G-tube irrigated and clamped," I handled it as Riggle did, by counting each verb as a fraction of the total verb phrase because a clause can have only one verb phrase (91).

I used Riggle's fraction technique to handle some ambiguous phrases as well. I found three kinds of ambiguous phrases total, which added greatly to my difficulty in assigning a voice and agent to each transitive verb phrase. The first type of ambiguous phrase occurred because medical documentation uses a pro-drop register, a register in which most of the pronouns are assumed and, therefore, not included for sake of expediency. In fact, the majority of passive verb phrases, and, for that matter all phrases that referred to the writing nurse, were agentless. In most instances, the agent could be easily determined by the context; however, there were a few instances where I could not definitively identify whether the agent was the writing nurse or other hospital personnel. One such example is the sentence "Specimen sent to lab," which is ambiguous because someone other than the nurse probably took the specimen to the lab, and a doctor actually ordered the labwork. So, the question is who is responsible for sending the specimen to the lab? In these ambiguous instances, I divided the verb into fractions and assigned those appropriate fractions evenly between the possible agents.

Another ambiguity occurred with phrases such as the following: "BLE [Bilateral extremities] elevated." Depending on which charted field the notation was in (i.e. "interventions," "musculoskeletal note," "topics covered"), the word "elevated," could be an adjective or it could be a passive verb. If the note is in a field referring to nursing interventions, it is assuredly a passive verb recording the action of the nurse; however, if it is in any number of observation or assessment fields, it is an adjective (Porter).

The final ambiguity I found occurred when I could not determine if a verb phrase was passive or active. Several verb phrases consisted of only a past tense verb or a past tense verb and an adverb recording the action performed to or with the focus of the charted field. For example, in one of the annotations for the charted field called "Correct ID Band," the nurse

wrote, “Applied.” I could easily have assumed that the intended meaning of this annotation is passive, “[The correct ID band was] applied [by me (or by another hospital employee)],” because that would have been most consistent with my observations of similar, more complete annotations. However, the implied meaning could also be “[I] applied [the correct ID band].” In these ambiguous instances, I assessed one-half point each to the categories of passive phrases and active phrases referring to the writing nurses’ actions.

Once I determined the voice and agency of all qualifying transitive verb phrases, I determined the function the passive voice seemed to serve in context, in light of sociolinguistic, compositional, and organizational communication theories. I relied particularly on Hobbs’s analysis of a physician’s note and the theoretical framework she established for assessing the evidentiary function of the passive voice in medical documentation. However, as demonstrated in the literature review, I also considered previous work on passive voice use in scientific and on-the-job writing.

The Survey

The survey I distributed (see Appendix A) had three parts:

(1) Educational background, which included questions about writing education

(2) Workplace background

(3) Writing samples

a) For item 1, participants were asked if they could write an example of a sentence or phrase in the passive voice

b) For items 2-4, participants were asked to write an annotation in response to situations they would commonly encounter on the job
c) For item 5, participants had to choose between the active and passive voice forms of ten common phrases used in nurses' notes

The survey questions and content represent most of the important information I hoped to gain: the educational and employment history of the participants, if educational and employment experiences affected the participants' writing, and whether their actual writing practices conformed to their preferences. Survey scope and content was restricted, however, by a 20-minute time limit, which was recommended to me by the clinical research officer at the medical center, the nurse managers, and Jeanne Kemppainen, Associate Professor of Nursing at the University of North Carolina Wilmington. Limiting the time it would take to complete the survey to 20 minutes forced me to edit any questions that required further details or explanations, specifically in part three of the survey.

Even without the participants' explanations for why they preferred one annotation over another, item 5 in Part 3 of the survey, still proved to be the most revealing item. It consisted of 10 pairs of annotations; each pair consisted of one annotation in the passive voice and its active equivalent. At least one of the annotations in each pair came directly from the notes I analyzed. In some instances, the original annotation, the one from the notes, was passive; in some instances, it was active. For each original annotation, I wrote the equivalent in the other voice. I chose annotations that represented a variety of agents and frequently performed actions.

After the participants completed the surveys, I retrieved them from the medical center. I organized them by nursing education background, writing education background, employment history, the voice used in the writing samples, and the preferences for active or passive voice

demonstrated in the final item. Once the survey data were organized, I compared the participants' educational and employment experiences to their use of the passive voice in the writing samples, and I compared their writing samples to the annotations they chose in item five of part three. I focused on discrepancies and inconsistencies between annotations recording similar actions performed by the same agents. I also looked at any discrepancies between the participants' preferences and the writing samples and the notes I analyzed.

RESULTS

Textual Analysis Results

Of 335 transitive verb phrases that met my requirements, I found that 48.96% are in the passive voice. Of the passive verbs, 85.98% of them refer to actions performed by the nurse writing the note, only 2.74% of them refer to patients' actions, and 10.37% of them refer to actions performed by other hospital personnel. The remaining 0.91% refer to patients' family members. Details of total passive voice use and voice by agent appear in Table 2.

Table 2. Total Number of Passive and Active Voice Verbs in the Nurses' Notes Organized by Agent

Writing Nurse		Patient		Other Hospital Personnel		Friends and Family of Patients	
Active	Passive	Active	Passive	Active	Passive	Active	Passive
52	141	103.5	4.5	12	17	3.5	1.5

As demonstrated in Table 2, I organized verb voice by agent in order to determine in what situations the RNs chose to use the passive voice as opposed to the active. I also organized the phrases according to agented or agentless construction. While agentless passives are not uncommon, it would be highly unusual to see an agentless active (imperatives excluded) anywhere other than medical notation, where most actions are understood to be performed by either the health care worker or the patient. None of the verb phrases referring the recording nurse's actions are agented. Pronouns, as I mentioned earlier, are frequently dropped from medical documentation, and any reference to the recording nurse is made obsolete by the use of CPRs, which hospital personnel log onto using their unique passwords. Of the 103.5 active verbs recording patient actions, 61.35% are agented, and, although only a very small percentage of patient actions were recorded in the passive voice, 3 out of 4.5 were agentless. Twenty-nine verbs total refer to actions performed by other hospital personnel, and all 12 of the actives are agented, but 10 out of 17 of the passives were agentless. The agentless passives referring to hospital personnel other than the recording nurse posed some problems in the analysis, so that some of the agentless passives are split between the nurse and other hospital personnel.

Survey Results

Writing Education and Understanding of the Passive Voice

In Part 1 of the survey, questions 2-4 addressed writing education. The basic questions are as follows:

(1) Do you recall any classes or lessons during your education that specifically addressed writing in health care documents? Circle Yes or No.

(2) Was your writing education limited to general English composition classes? Circle Yes or No.

(3) How did you learn to write patient assessment notes? (They had to choose from formal education, on the job, other, or never received any instruction at all on how to write patient assessment notes.)

The results of the writing education questions are detailed in Table 3.

Table 3. Participants' Writing Education Backgrounds, Survey Questions 2-4, Part I

	Question 2	Question 3	Question 4
Participant 1	Yes	No	Formal Education
Participant 2	Yes	No	On the Job
Participant 3	Yes	Yes	On the Job
Participant 4	No	Yes	On the Job
Participant 5	Yes	No	On the Job
Participant 6	No	Yes	Formal Education & On the Job
Participant 7	No	No	Formal Education
Participant 8	Yes	Yes	Formal Education
Participant 9	No	Yes	Formal Education
Participant 10	Yes	Yes	Formal Education
Participant 11	Yes	No	Formal Education
Participant 12	Yes	Yes	On the Job
Participant 13	Yes	No	Formal Education
Participant 14	No	Yes	On the Job & Other (clinicals)
Participant 15	Yes	No	Formal Education
Participant 16	Yes	Yes	Formal Education

Frequency and Context of Passive Voice in Sample Notations

Part 3 of the survey had five items. In the first item, I asked the participants if they could write a passive voice phrase or sentence. Only 1 out of the 16 participants, Participant 3, was able to knowingly write a sentence in the passive voice. For the next three items, participants were asked to write notations to record three different situations they might encounter at work. The first situation, item 2, read as follows:

> If you had just finished discontinuing a patient's IV, please give an example of how would you record that action, in narrative form, in the chart?

Discontinuing a patient's IV is very common action performed by RNs and annotated in nurses' notes. The second situation, item 3, asked the participant to demonstrate how she would record information obtained from other hospital personnel:

> You called Dr. X to report an apical pulse of 50 and BP of 100/60 for your patient. Dr. X gave you a verbal order to withhold the patient's next digoxin and Cardizem (calcium channel blocker) doses and wants you to increase the IV of D5LR to150 cc/hr. How would you record your actions and the doctor's response, in narrative form, in the chart?

The third and final situation, item 4, asked the participant to record a request made by a patient:

> How would you record a patient's complaint of post-operative pain and his or her request for pain medication, in narrative form, in the chart?

Using the same criteria I used to find the frequency of passives and actives in the nurses' notes, I identified the number of passives and actives used in each of the participants' writing samples, so I could compare them to their background information and their preferences in item 5 of Part 3

and to the responses of the other participants. Participants' passive and active voice use in the three sample writing situations is detailed in Table 4.

Table 4. Participants' Passive and Active Voice Use in Sample Notations in Survey Items 2-4, Part 3

	Item 2		Item 3		Item 4		Totals	
	Passive	Active	Passive	Active	Passive	Active	Passive	Active
Participant 1	0	2	0	1	0	1	0	4
Participant 2	0	1	0	2	0	1	0	4
Participant 3	0	1	2	0	0	1	2	2
Participant 4	1	0	3	0	0	1	4	1
Participant 5	2	0	4	0	2	0	8	0
Participant 6	1	0	3	0	0	1	4	1
Participant 7	1	0	1	1	0	3	2	4
Participant 8	0	2	1	2	0	3	1	7
Participant 9	1	0	2	0	0	2	3	2
Participant 10	1	0	2	0	0	2	3	2
Participant 11	2	0	2	1	0	2	4	3
Participant 12	1	0	2	0	0	2	3	2
Participant 13	2	1	2	1	0	1	4	3
Participant 14	1	0	2	1	0	2	3	3
Participant 15	1	1	0	3	0	1	1	5
Participant 16	1	0	1	2	0	2	2	4

Comparison of Participants' Preference for Active vs. Passive Voice Phrases

Item 5 of the third part of the survey yielded the most interesting results from the whole survey. The notation pairs used in item 5 represented actions performed by a variety of agents, which appeared more than once during the textual analysis:

(1)	New bag hung.	Placed new bag.
(2)	Pt doesn't require meds.	No meds required by Pt.
(3)	Dr. X paged.	Paged Dr. X.
(4)	Changed pouch and seal.	Pouch and seal changed.
(5)	Insulin increased to 24 from 18u.	Increased insulin to 24 from 18u.
(6)	No Q 4 vitals reported.	Reported no Q4 vitals.
(7)	DC'd Foley.	Foley DC'd.
(8)	None ordered (refers to labwork).	Ordered none (refers to labwork).
(9)	Pt had seven beats of V-tack reported by telemetry tech.	Telemetry tech reported Pt had seven beats of V-tack.
(10)	Pt taken to CT scan.	Took Pt to CT scan.

Numbers 1, 3, 4, 5, and 7 are actions performed by the writing nurse. Number 2 is obviously a patient action, and the remaining four pairs are actions performed by other hospital personnel and recorded by the writing nurse. The participants chose the passive voice notation for the nurse's action 68.35% of the time, which is between 5 and 6% lower than the percentage of passive verbs used for recording nurses' actions in the original notes. However, passive voice preference for notations referring to other hospital personnel's actions was approximately 8% higher than in the notes. The biggest difference I found between the participants' preferences

and the original notes was that the passive notation was chosen for the patient action 62.5% of the time, an increase of 58.33% over passive use for patient actions in the notes. This increase would be more significant had there been more than one notation pair referring to patient actions. The annotation upon which I based the pair, “None requested,” actually did occur in the notes more than once, and it is probably common for nurses to write this particular patient action in the passive. Table 5 presents the complete results of item 5 by participant. It also includes total passive and active preferences by participant and notation pair. It is important to note that Participant 1 did not choose either of the notations for 1 or 6. For 1, she substituted her own phrase, “Δ IVF,” which means, change IV fluids. She wrote, “Do not understand,” for number 6, which is telling since “No Q4 vitals reported” came directly from one of the notes.

Table 5. Participants' Preferences for Active or Passive Phrases in 10 Pairs of Notations from the Survey, Item 5 of Part 3

Participants	1	2	3	4	5	6	7	8	9	10	Total	
											Passive	Active
1	*	P	A	A	A	*	P	P	P	P	5	3
2	P	P	A	A	P	A	P	P	A	P	6	4
3	A	P	A	A	A	A	P	A	A	A	2	8
4	P	A	P	P	P	P	P	P	A	P	8	2
5	A	P	P	P	P	P	P	P	A	P	8	2
6	P	P	P	P	P	A	P	P	P	P	9	1
7	A	A	P	P	P	A	P	P	A	P	6	4
8	P	P	A	P	P	A	P	P	P	P	8	2
9	P	A	P	P	P	P	P	P	A	P	8	2
10	P	P	P	P	P	P	P	A	A	P	8	2
11	P	A	P	P	P	P	P	P	A	P	8	2
12	P	A	A	A	A	P	P	P	P	A	5	5
13	P	P	P	P	A	A	P	A	A	P	6	4
14	P	P	P	A	A	P	P	P	P	P	8	2
15	P	A	A	A	A	P	A	P	A	P	4	6
16	A	P	A	P	A	P	P	P	A	P	6	6
Passives	11	10	9	10	9	9	15	13	5	14	105	
Actives	4	6	7	6	7	6	1	3	11	2	53	

* Indicates the participant did not choose a phrase for that pairing

DISCUSSION

Agency is, according to studies of medical, scientific, and technical writing, the most important factor determining verb voice (Cornelis; Ferreira; Hobbs; Riley; Riggle; and Rodman). According to Hobbs, physicians use the passive voice "conventionally and pervasively" to qualify information obtained secondhand from other hospital personnel (465). My interpretation of passive voice use in the context of the hospital discourse community relied heavily on Hobbs's research because, as I wrote earlier, nurses' notes and physicians' notes are similar in form. However, my textual analysis revealed that nurses' use the passive voice predominantly to record their own actions. Furthermore, I discovered that the passive voice is sometimes used inconsistently, and its use varies from nurse to nurse, even within the same unit. Finally, the survey revealed that only 1 of the 16 participants consciously knew the difference between the passive and active voice. Passive voice use seems to be a convention in the medical discourse community that, in some instances, may not serve a necessary function in nurses' notes but is, rather, a symptom of the disparity between actual nurse work and nursing documentation as identified by Brooks.

Function of the Passive Voice in Nurses' Notes

The passive voice percentage in nurses' notes is higher than one would find in non-medical, workplace writing. For example, Riggle found that approximately 30% of the transitive verbs in Air Force documentation were passive, which, he notes, was high compared to an earlier analysis of business writing (96). The pervasiveness of passive voice use in nurses' notes, as

compared to other kinds of workplace writing, makes it a defining characteristic of nursing documentation. Passive voice frequency in nurses' notes is similar to that found by Riley and Rodman in scientific writing. Its function is similar as well. Riley and Rodman both note that passive voice use is highest in the expository sections of scientific articles, Methods and Results (247; 309). Nurses' notes, as opposed to physicians', are almost exclusively expository, which may partially explain the differences I found between nurses' passive voice use and physicians' passive voice use as revealed by Hobbs.

Physicians' primary responsibility in patient care is to diagnose the problem and then plan a course of treatment. As Hobbs explains, physicians' notes include the subjective complaints or sensations of the patient or the patient's caregiver, the physician's own observations of the patient's condition, the physician's diagnosis, and the treatment plan. The format used for these notes can differ, particularly where CPRs are used; however, the basic narrative is the same and the physician's primary responsibilities, diagnosis, and treatment are the same. Although nurses also make diagnoses, nursing diagnoses are "clinical judgment[s] about individual, family, or community responses to actual or potential health problems or life processes" (Daniels 309). Nursing diagnoses and the resulting nursing care plans are concerned with treating and caring for the patient, not treating the disease or other ailment. Some examples of nursing diagnoses types are "risk for injury," "social isolation," "hypothermia," and "spiritual distress" (Daniels 224-5). Examples of nursing diagnoses I found during my analysis are "Pt anxious to go home," "Argues alot [sic] with spouse, frequent verbal arguments," and "Shallow due to increased level of pain." These diagnoses are more similar to observations than medical diagnoses, the common term for diagnoses made by physicians. In fact, some nursing diagnoses, like "Diarrhea" and "Total urinary incontinence" (Daniels 224), are, to someone outside of the

medical discourse community, indistinguishable from what most people would call observations. Essentially, no sections in nurses' notes appear argumentative in form or function.

According to Barbara Lauritsen Christensen and Elaine Oden Kockrow, some of the most fundamental rules for charting by nurses include "Be objective in charting—only what you hear, see, feel, smell. Chart facts; avoid judgmental terms and placing blame. […]. Write only what you observe—not opinions" (98). Nurses' notes are most similar, therefore, to the Methods and Results sections of scientific articles, and nurses' use of the passive voice when recording their own actions serve similar functions. The passive voice focuses attention where it belongs, not on the nurse, but on the patient and materials being used to treat the patient and helps to avoid unnecessary, redundant use of the first person pronoun, "I." Avoiding the use of "I" in medical documentation is not just a matter of stylistic choice, it is a necessity born out of the frenetic hospital pace.

In the 34 notes I analyzed, the nurses never included a pronoun or nominal phrase to refer to themselves; every phrase or sentence, passive or active, referring to the writing nurses' actions was agentless, which is normal for medical documentation, particularly where CPRs are in use. Patient actions are recorded in an extremely different way, however. Patients were the agents in 108 out of the 335 transitive verbs phrases counted. Ninety-five point eighty-three percent of those phrases were active, and 60.19% of the active and passive phrases were agented, indicated by use of the standard abbreviation "Pt." The difference between passive voice use in phrases where the patient is the agent and where the nurse is agent is drastic—2.74% versus 73.89%. Tana Porter explained this significant difference by indicating that in medical documentation, where most sentences and phrases are agentless, the passive voice should ideally be used to mark actions as being performed by the nurse, and the active voice should mark actions performed by

the patient. Although I can find no other documented evidence of this practice in nursing textbooks or articles I have surveyed, I have noticed that, in the examples of nurses' notes given in five current textbooks, the passive voice is never used to record patient actions[1]. However, in four out of five of the textbooks the same consistency does not exist for recording nurses' action, where passive and active voice phrases are used interchangeably[2]. Potter and Perry, though, use the active voice exclusively in their sample notes (507).

Physicians also use the passive voice to differentiate between the actions of agents. However, physicians predominantly use the passive voice to record the actions of other hospital personnel or qualify information obtained from them (Hobbs). Of 164 passive verbs in the nurses' notes, only 17 of them referred to actions performed by other hospital personnel. In fact, the total number of transitive verbs recording actions of other personnel was only 29. The disparity in the number of actions or amount of information from other personnel recorded by nurses as opposed to physicians is because nurses have more contact with patients than physicians do. Although, this fact does not explain why nurses only use the passive voice 58.62% of the time when recording the actions of or information obtained from other personnel. My only conclusion would be that this is another example of inconsistent uses of the passive voice.

While the 34 notes did not demonstrate a consistent voice for recording actions of other hospital personnel, the voice was more consistent when nurses recorded their own actions and those of patients. Aside from keeping the focus of the notes on the patient and away from the nurse, alternating between passive voice for nurse actions and active voice for patient actions does help to clarify the agent when the phrase is agentless. Louise Cornelis recognizes that this "alternation principle" (291) is frequently used, and should be encouraged, in computer manuals.

When using the alternation principle, a writer would use the active voice to refer to user actions and the passive voice to refer to the subsequent automated response performed by the computer. Cornelis suggests that this use of the passive voice to background an inanimate, non-volitional agent, the computer, is acceptable because, when the agent is fore-grounded, the reader sees the actions through the agent's point-of-view, but an inanimate agent cannot have a point-of-view, realistically (290). The passive voice blocks the computer from being the "relational figure of the event" (Cornelis 291) and allows the user to assume that position.

Although the nurse is obviously animate and volitional, the effect of using this alternation principle in nurses' notes is the same because it does clarify the agent in agentless constructions. It also serves the rhetorical purpose of deferring attention away from the agent, the nurse, and towards the patient or the materials being used to treat the patient. Deferring attention away from the agent and focusing it on the objects of study or observation, Ding writes, is important to the falsifiability and repeatability of scientific experiments (137). It is also important in medical documentation that events appear repeatable, not discrete.

Passive Voice Use Inconsistencies

Using the passive voice according to the alternation principle would be, as Tana Porter suggested, an effective method for differentiating between agentless phrases describing the actions of the nurse versus those describing actions of the patient. However, my results show that the passive voice, although it is used very frequently to record nurses' actions, is not used consistently enough to demonstrate that nurses are being taught to use the passive voice according to the alternation principle. This conclusion is further supported by the results of my

survey that show only 1 out of the 16 nurses participating can consciously write a passive voice sentence. The inconsistent use of the passive voice in the notes I analyzed and the even more inconsistent results I gained from the survey may indicate that the passive, in instances where the phrase could be just as easily and clearly written in the active, does not serve a necessary function in nurses' notes.

The third note I analyzed had 12 agentless passives referring to the writing nurse's actions and 2 agentless passives referring to the actions of other hospital personnel. I have reproduced the 23 annotations from the third note below (each annotation was in a different charted field). I have used lower case letters[3] and added the numbers and the underlining to make the annotations easier to refer to in my discussion. The content and wording are the same, including typos and spelling mistakes (see Appendix C for explanation of abbreviations):

(1) TPN D/C per MD order

(2) Patient ambulating in hallway with PT

(3) PICC

(4) First unit of plasma started

(5) Percocet 2 tabs given PO

(6) 2nd unit

(7) Left chest

(8) Toradol 30MG given IV

(9) With wife in hallway

(10) First unit of plasma started, second unit started

(11) 3rd unit

(12) Second unit stopped, third unit started. Patient toelrating well

(13) Third unit done, fourth started

(14) Third unit finished, fourth unit of plasma started

(15) Ambulating in hallway

(16) With wife

(17) Fluids changed per MD order

(18) DR. [redacted] notified of dextrose being in IV fluids, new orders given

(19) 16units of sliding scale+ 8units of Novolog

(20) Per MD order

(21) DR. [redacted] notified of PT and INR results, new orders given

(22) Patient ambulating in hallway

(23) Open areas to BIL groin aeas.[4]

There is only one active transitive verb in this note, "Pt toelrating [sic] well." All the underlined phrases refer to nurse actions except for "New orders given," which appears in annotations 18 and 21. This note demonstrates an extreme use of the passive voice, particularly because there are very few patient actions recorded in it. Most of the notes had a fair mix of passive and active verbs, with the passive being used for nurses' actions and the active for patients'. A few of the notes were almost entirely in the active voice, however. I have reproduced the annotations from one such note, note 21, below:

(1) Demerol PCA

(2) Cleansed around G tube with ½ strength H2O2 and applied dry gauze dressing.

(3) Removed old DRSG, saturated with greenish drainage. Tissue beefy red with fistula draining. Pacekd with wet Kerlix and covered with ABD pads, and chuck pads and secured with binder. Patient tolerated procedure well.

(4) D/C fluids per MD order

(5) Percocet 2 tabs given PO

(6) Ambulating in hallway

(7) Walker

(8) D/C PCA per MD order

In note 21, the nurse recorded all of her actions in the active voice except for "Percocet 2 tabs given PO." I can find no difference between the actions recorded in note 3 and those recorded in note 21 that would account for the different use of voice. Some of the phrases, in fact, are nearly identical except for voice: "TPN D/C per MD order" and "D/C PCA per MD order."

It was interesting, though, that even in the predominantly active note 3, the nurse still used the passive voice to record the administering of medication; both notes contained the exact same phrase, "Percocet 2 tabs given PO." It is interesting because 2 of the 4.5 passive phrases where the patient was the agent were about medication: "None requested" and "No meds required." Furthermore, the results of item 5 in Part 3 of the survey, the notation pairs, showed that the participants chose the passive, "No meds required by Pt," 62.5% of the time. However, in item 4 of Part 3, when the participants were asked to demonstrate how they would record a

patient's complaint of pain, only 1 of the 16 participants used the passive voice. Patient requests for pain meds and patient complaints of pain occur quite frequently in the 34 notes, and nearly always in the active voice. However, the survey and the notes would seem to suggest that even nurses who are less inclined to use the passive may be more inclined to do so when recording actions related to medications. If this true, then it could be explained by the extreme importance and hazardousness of medication administration in a hospital—the more important the object, the more inclined the writer is to focus attention on it and away from the agent by using the passive voice.

Aside from individual preference, an alternation principle, a lack of argumentative writing in nurses' notes, and the rhetorical function of focusing attention on patients and materials, passive voice frequency, function, and inconsistency could be explained by several other factors. Other possible factors affecting passive voice use in nurses' notes are the disparity between actual nurse work and nursing documentation (Brooks), changing educational practices, rigid hospital hierarchy and power structure (Dauterman), and even gender.

Earlier I referred to Brooks's qualitative study of nursing documentation in which she interviewed nurses to discover their attitudes towards documentation. Brooks's study is one of several studies that have been performed in the nursing community to discover why nurses' documentation "continues to draw criticism from professional, community, and regulatory organizations because of incomplete, substandard charting practices" (189). All of these studies shared some common conclusions: many nurses are not confident about documenting their knowledge and professional judgments; standard documentation methods and forms do not reflect the values and knowledge of nursing practice; organizational expectations and norms

significantly influence documentation practices; and some nurses are not confident in their writing skills (Brooks; Davis, et al.; Howse and Bailey; Renfroe, et al.).

The most significant barriers to documentation that Brooks identified were also salient to the most criticized effect of passive voice use, the effect of altering perceptions of personal responsibility:

> The benefits of documenting opinion and subjective data did not seem to outweigh the risks, and, therefore, the nurses in the study documented very little about nursing issues and patient concerns. They were careful to document facts that would not provoke questions or criticism. Documentation in the clinical record was not perceived as the place to share and integrate new knowledge but rather as a defense and justification of nursing actions. (197)

Brooks's conclusion reveals that many nurses write defensively, and I conclude that someone who is writing defensively might make greater use of the passive voice when recording his or her own actions to shift perceived responsibility away from him or herself. I am not suggesting, just as Bohner and Henley and Miller do not, that using the passive voice to abnegate responsibility is intentional. However, whether it is intentional or not, it has the effect of transferring perceived responsibility away from the agent.

Dauterman notes that "Institutional roles that offer individual nurses little space for contemplation or responsibility for independent decision making" are also a barrier to improving documentation practices in the nursing discourse community (50). The rigid hospital hierarchy, which has maintained that nurses are subservient to physicians, explicitly and implicitly limits the responsibilities nurses can have for making independent decisions regarding patient care. For liability reasons, RNs may not make medical diagnoses, just as paralegals cannot give legal

advice and tellers at a bank cannot give investment advice. However, as I noted earlier, nurses do make nursing diagnoses based on their specialized knowledge and roles as care providers. Nursing diagnoses should be included in nursing documentation, primarily in progress notes (patient assessments) and nursing care plans; yet, according to Davis, et al., assessments consisted primarily of physical observations, not the psychosocial concerns that are the focus of nursing diagnoses (965).

Although the term "nursing diagnoses" has been around since the 1950s, most of the developments in the research and codification of nursing diagnoses have occurred since the late 1980s (Daniels 222-23). In 1992, standardized nursing diagnoses terms were accepted into the Unified Medical Language System and are continually being tested and amended (Daniels 309). The nursing community has been changing in other ways that appear to affect nursing discourse. In the 1990s, more nurses than ever before received BSNs and had academic training in nursing; previously, most RNs came from diploma and associate programs where clinical, rather than academic training, was emphasized (Dauterman 49). As Dauterman recorded, the younger, "university-trained nurses" equated being a professional with writing, research, and publishing (49). She also observed that many of the nurses understood the connection between writing and thinking, and this understanding frequently made the nurses who were not skilled writers even more frustrated (49).

Nursing practice, like other professions born out of necessity, has historically been more pragmatic than academic. There has been, particularly since the late 1980s, early 1990s, a move in nursing towards more evidence-based practice in an attempt to close the theory-practice gap and improve the overall quality of care (Martin and Mitchell). According to Alison P. Smith, the need to shift to more evidenced-based practice is also to keep up with the ever-increasing

demands of an aging population and the stress they are putting on a health care system already stretched too thin (343). This push to publish can be seen throughout the nursing community literature.

The only direct mentions of the passive voice in nurses' writing I found in literature from the nursing community were in reference to published, academic writing, not on-the-job writing. Cheryl L. Mee defends use of the active voice in nurses' professional and academic writing because it, and not "scholarly language" that makes heavy use of the passive voice, is a reflection of the way nurses actually communicate on the job (8). However, Mee is referring to oral communication on the job, not written. Karl Terryberry in *Writing for the Health Professions* also discourages passive voice use in academic writing (63-66). Terryberry spends two-thirds of the book describing the writing process and academic writing, and then in the section on writing for administrative purposes he stresses, "The process of writing notes also entails adopting a writing style that conflicts with the methods described in this text" (265). Writing methods that are encouraged in the academic nursing discourse do not seem to apply to, or are not encouraged for, on-the-job writing. There is sound evidence indicating that nurses do not look at writing notes as "writing." Dauterman found that only one of the nurses she interviewed did not express a dichotomy between "real" writing and the kind of writing nurses do on the job (52).

Dauterman's findings suggest another possible reason for the inconsistencies I found in the results from Part 1 of the survey. Curious as to whether nurses felt like their formal education prepared them for writing on the job, I asked the participants to answer questions about their writing education. The data resulting from the writing education questions are detailed in Table 3. Four of the 16 participants gave contradictory answers to two of the questions, 2 and 3:

Question (2) Do you recall any classes or lessons during your education that specifically addressed writing in health care documents?

Question (3) Was your writing education limited to general English composition classes?

Four participants answered "Yes" to both questions indicating that they did recall classes specifically addressing writing in health care documents and that their writing education was limited to English composition classes. Originally, I concluded that the contradictions could only be explained by my own poor choice of words or by the participants' misunderstandings of the questions. While these are the more likely explanations, it is possible that participants who answered "Yes" to both questions did so because they did not equate on-the-job writing with "real" writing. Further research into this area would certainly prove beneficial.

I had hoped, by including questions regarding educational background and writing education in the survey, I could discover if there was some correlation between educational background and passive voice use. Knowing that the nursing community has been shifting focus towards more evidenced-based practices and thus a more academic, rather than practical or clinical, approach to education and training, I hypothesized that this shift could affect passive voice use. Since the passive voice has been consistently losing favor over the past few decades (Sheldrake), nurses who graduated more recently might use the passive voice less than nurses who graduated longer ago. I also considered that a stronger academic emphasis (as opposed to practical) in nursing education could influence passive voice use in nurses graduating more recently and from BSN programs. However, I found no evidence in the survey results to support my hypothesis.

The average number of passive verbs in the writing samples, items 2-4 of survey Part 3, was 46.88%, which is remarkably close the percentage of passive verbs in the 34 real nurses'

notes (48.96%). In item 5 of Part 3, participants chose the passive voice phrase 66.04% of the time. Participant 6 had the earliest graduation date, 1979. She demonstrated much higher than average passive voice use, 80% in the writing samples, and preference, chose the passive voice notation in all but one of the ten notation pairs. However, Participant 7, who had the next earliest graduation date at 1988, demonstrated below average passive voice use, 33.33% in the writing samples, and a lower preference for passive voice notations, choosing the passive notation in 6 out of 10 pairs. Considering the small sample size, I cannot make any conclusions for the nursing discourse community; however, I can conclude that there is no demonstrated correlation between date of graduation from nursing school and passive voice use or preference by the participants in this study. There is also no demonstrated correlation between nursing degree, BSN or ADN, and passive voice use or preference by participants in this study.

The final factor I wanted to consider when analyzing passive voice use and inconsistency in nurses' notes was whether the gender imbalance in nursing might affect composition processes. As all of the RNs on the floor where the notes were written and the surveys were distributed are female, according to the nurse managers, I could make no comparisons between notes written by female nurses versus those written by male nurses. While this could prove to be an interesting study in the future, I found only one article indicating that there may be a difference between passive voice use by men and women. In her paper paper, "Writing and Differences: The Student, Gender, and the Text," Cheryl B. Scarboro discusses her investigation into the different composition processes of 139 male and female fifth grade students. She found a "significant difference between the sex of the author and voice" (17). According to Scarboro, the female students were far more likely to write using passive voice than were the male students (17-20).

Limitations of this Study

Originally, this study began as a discourse analysis of the frequency and function of the passive voice in nurses' notes approached only from a textual perspective using an ex post facto descriptive method. I wanted, first, to discover whether passive voice use was as pervasive and served the same function in nurses' notes as in physician's notes (Hobbs). I obtained 34 notes and determined the frequency of passive voice verbs. Then, I attempted to interpret the function of passive voice use in the notes in light of sociolinguistic, compositional, and organizational communication literature that addresses both passive voice use and medical notation.

These inconsistencies led me to expand my study to include more qualitative data that would allow me to learn more about nurses' compositional processes from what Faigley calls individual and social perspectives. Ideally, I would have distributed surveys to and performed interviews with a representative sample of nurses, which is the best way to learn about how an individual's compositional processes are affected by the discourse community in which she works and writes (Faigley; Odell and Goswami; Odell, Goswami, Herrington, and Quick; Riggle). Unfortunately, due to time constraints and the difficulties involved in scheduling and arranging personal interviews with the nurses, personal interviews were ruled out as a method for obtaining qualitative data for this study. I believe, despite the fact that I was able to distribute surveys to RNs in the department from which I obtained the original 34 notes, that my inability to perform personal interviews with the nurses has limited the scope and complexity of my results and conclusions. It is my hope that this pilot study, having revealed the inconsistency and complexity of passive voice use in nurses' notes, will lead, in the future, to more, comprehensive studies into writing in the nursing discourse community.

However, the survey also represents a compromise between my desire to learn as much as I could about the individual and social context of nurses' passive use in on-the- job writing, and the realities of performing field research. I submitted earlier versions of the survey, for review by the clinical research officer, that asked the participants to go into detail about the writing education they had received and their reasons for choosing one way of writing an annotation over another. The clinical research officer criticized these earlier versions of the survey for being too long. She suggested that there was little likelihood anyone would complete the survey if it took longer than 20 minutes or if it required too much writing. The nurse managers for the medical-surgical unit concurred with her assessment. I was still able to ascertain the participants' preferences for one voice over the other through the last section of the survey; however, I was not able to discover their stated justifications for their choices.

I will admit there are advantages in research to not interviewing or intervening with the people being studied. Riggle admits in his article that "Questioning writers about their reasons, however, made many of them defensive, even though I assured them I believed there were no right answers" (93). Hopefully, not being present while participants completed the survey and not being able to perform interviews had the benefit of getting more honest, less self-conscious answers from the participants.

Recommendations for Future Research

This pilot study has raised more questions than it has answered, revealing many areas into which further research in the nursing discourse community needs to be done. First, significantly more nurses' notes need to be analyzed for passive voice frequency and context in

order to corroborate the results I obtained from the 34 notes. For the results to fairly represent the entire nursing discourse community in the United States, notes from multiple hospitals in different regions of the country would need to be analyzed. Furthermore, the notes would need to be selected randomly from diverse hospital departments. In connection with an expansion of the note sample size, would be a significant increase in the number of nurses surveyed, and, as I mentioned earlier, I regret that I was unable to perform interviews with the nurses and believe that this research could have benefited significantly from such qualitative data.

I believe that multiple comparative studies could also result from this research. A comparison of the writing processes of nurses from different departments could reveal to what extent, if any, patient demographics and nurses' responsibilities could affect their on-the-job writing. For instance, would the heightened emotional distress of working in an emergency room, a psychiatric ward, or a pediatric oncology ward affect nurses' composition processes? Considering Bohner's, Henley and Miller's, and Kameny and Bearison's studies on uses of the passive voice to record observers' descriptions of rape and the personal narratives of children suffering from cancer, respectively, it is reasonable to surmise that there may be a connection between passive voice use and emotional distress.

Future research could also address the differences between handwritten documentation and computer documentation and its effects on grammar and syntax. Research like this could contribute significantly to the growing body of knowledge about the effects of new technologies on composition and composition pedagogy. The nursing community could benefit significantly from research comparing and contrasting documentation with CPRs and traditional handwritten patient records, considering the dearth of literature specifically addressing computerized documentation. Hospitals are rapidly moving towards the use of CPRs, and yet the textbooks I

surveyed touched only very briefly on documentation for CPRs. The database used by the medical center barely resembled the standard formats that are the focus of most nursing documentation education.

As I noted in my discussion, I was unable to find any correlations between educational background or writing education background and passive voice. Even if I had, the correlations would only have applied to the participants surveyed. I believe there may still be a correlation between when a nurse received her formal education and passive voice use and that the correlation would show a trend towards decreased passive voice use with more recent graduation dates because of the decreasing popularity of the passive voice. A similar trend might be observed if one were to compare the changes notes have undergone over the past several decades.

A historical survey of nurses' on-the-job writing might also reveal how technology, medical advances, managed care, and government regulations have affected nurses' notes over time. Finally, further comparative research between passive voice use and gender could also be illuminating considering the literature on possible psychological connections to passive voice use and the dearth of literature on passive voice use and gender.

CONCLUSIONS

> Everyday texts are, by definition, quotidian, yet this does not make them trivial. Because they both reflect and shape our attitudes toward our worlds and one another, the consequences that attend everyday texts are serious, complex, and often far-reaching. (Stillar 195)

More than once while I was working with administrators and nurses at the hospital, I was asked, “So, what? So what if nurses use the passive voice a lot in their notes? So what if passive voice use is inconsistent?” I will admit there were moments when I almost agreed with them; I almost fell into the trap ethnographers and other researchers in the social sciences must constantly be wary of—I was at risk of sympathizing too much with the population I was studying. Anthony Paré suggests that "rejecting the role of experts" (67) might make it possible for academics to learn more about the problems of practitioners, so they could focus on addressing the problems of the workplace and be more sensitive to their issues. However, Paré's solution could run the risk of perpetuating the workplace status quo rather than making careful and thoughtful suggestions for improving workplace communications.

The reality is that no community is under greater scrutiny than health care. Health care workers face situations everyday where one mistake could cost a human life. Although nursing is a predominantly oral culture, and the spoken word more effectively and eloquently communicates the values and concerns of nurses and the nursing profession (Dauterman; Brooks), speech is ephemeral. Health care workers are responsible for maintaining records that contain the complete narrative of patient care and are constantly reminded that their notes could become evidence in court proceedings. When medical documentation is interpreted by people outside the medical community, it is not enough that it be complete; it must also be clear and readable. It is not the responsibility of nurses and health care workers alone to ensure that they have good writing skills; it is the responsibility of specialists in composition and communications to make sure students are adequately prepared to be good communicators, whatever their prospective career. This pilot study clearly demonstrates that nurses’ written communication skills and the consistency of nurses’ written communications could, and should,

be improved, but only after more research is performed and the individual and social perspectives of nurses' written discourse are better understood.

NOTES

[1] For examples of nurses' notes in nursing textbooks see Christensen and Krockow 91-93; Daniels 300-04; deWit 105-07, 111-14; Doenges, Moorhouse, and Burley 146-47; and Potter and Perry 507.

[2]For example, in Doenges, Moorhouse, and Burley on page 146, one notation is "Applied wet sterile dressing with paper tape." On the facing page, 147, the same action appears, "Sterile wet dressing applied with paper tape."

[3]All but one of the 34 notes was typed using all capitals. According to Tana Porter and the nurse managers at medical center, typing in all-caps is standard practice.

[4] I searched extensively to find out if "aeas" was an abbreviation for anything and finally came to the conclusion that it is a typo. Considering the context, it should most likely read "areas."

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APPENDICES

Appendix A: The Writing Survey Used

Writing Survey of Nurses at NHRMC

By voluntarily completing this survey, you are giving your consent to participate in this study.

The purpose of this survey is to gain insight and understanding into the writing processes of nurses in the workplace. As you know, writing is an important but often overlooked component of a nurse's daily responsibilities. The notes that nurses take are essential to patient care, and ensuring that these notes are written clearly and accurately positively impacts patient care. Hopefully, research such as this can be used to benefit nursing practice and education.

Please read the following questions carefully and answer to the best of your ability. If you don't know the exact information requested in Parts I and II, the background information parts, just answer them to the best of your ability and move on. Thank you very much for participating and contact me if you have any questions or concerns:

Kelly Porter, Graduate Student in English, UNC-Wilmington
Ph: 686-3242
Email: klp4782@uncw.edu

Thank you again for participating!

Part I: Educational Background

1. Please list the types of nursing degrees (BSN, diploma, ADN, etc.) you have received and the years in which you completed each degree.

Degrees Received	Year Completed

2. Do you recall any classes or lessons during your education that specifically addressed writing in health care documents?

   Circle Yes or No

3. Was your writing education limited to general English composition classes?

   Circle Yes or No

4. How did you learn to write patient assessment notes? For example, do you feel you were adequately prepared by your formal education to write notes, or do you feel like you learned very little about writing in school and most of your writing knowledge has come on the job?

   Please check the best answer:

   - □ Formal Education (i.e. nursing school)
   - □ On the Job
   - □ Other:_____
   - □ I never received any instruction at all on how to write patient assessment notes.

Part II- Workplace Background

1. Please list your current and previous nursing positions/titles in the chart below starting with the most recent.

   Please include also the department (if applicable), the type of organization for which you worked, and the approximate length of time you worked, in the table below. (If you need more space, feel free to use the back of the page.)

Position/Title	Department (if applicable)	Type of Organization/ Institution (check one)	~Length of Time
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	
		□ Hospital □ Private Medical Practice □ School □ College/University □ CRO □ Other:____________________	

Part III- Writing Samples

1. Please write an example of a passive voice sentence or phrase? If you are unsure what a passive voice phrase is (don't worry, most people don't know), then please write N/A.

2. If you had just finished discontinuing a patient's IV, please give an example of how would you record that action, in narrative form, in the chart?

3. You called Dr. X to report an apical pulse of 50 and BP of 100/60 for your patient. Dr. X gave you a verbal order to withhold the patient's next digoxin and Cardizem (calcium channel blocker) doses and wants you to increase the IV of D5LR to 150 cc/hr. How would you record your actions and the doctor's response, in narrative form, in the chart?

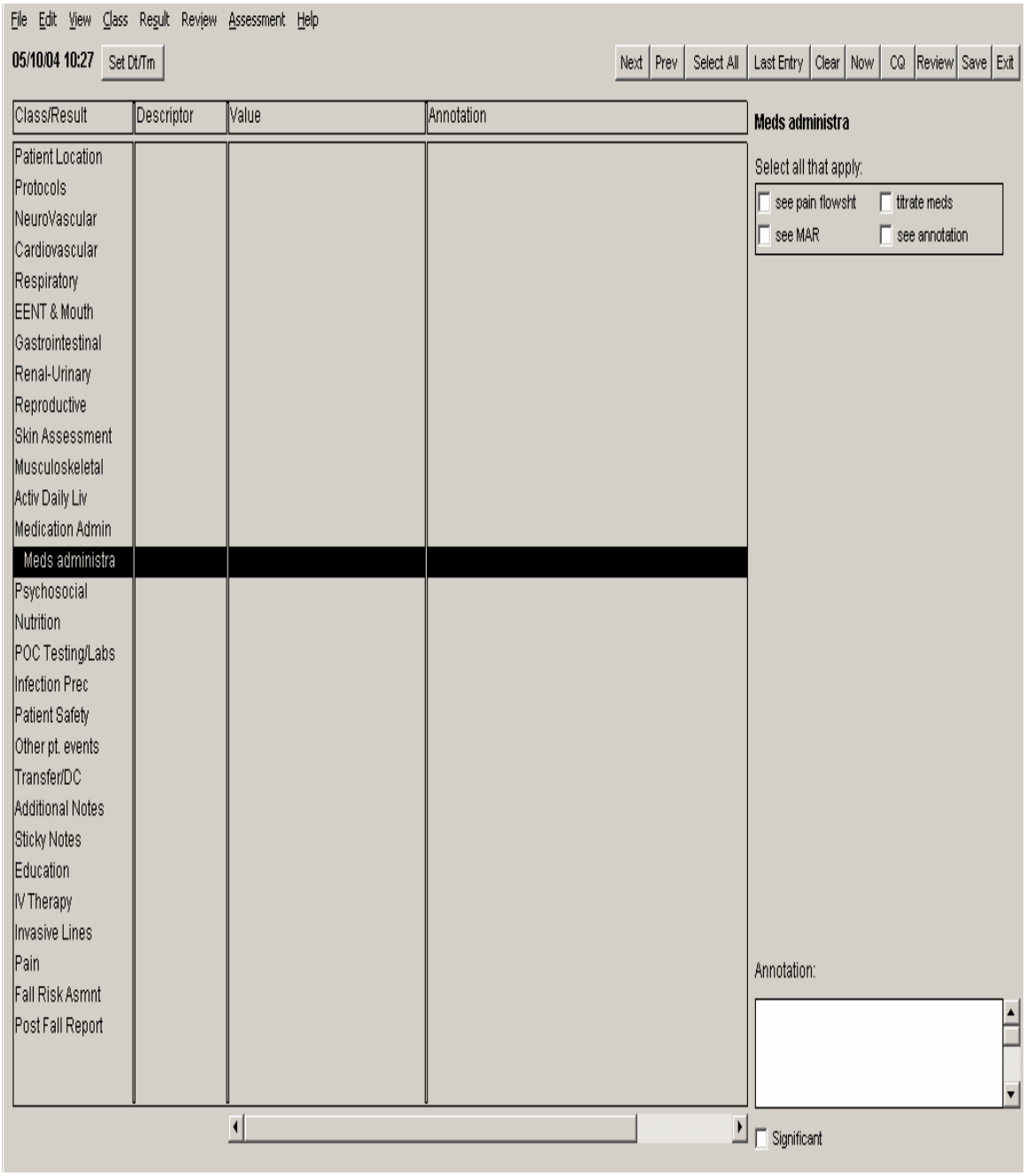
4. How would you record a patient's complaint of post-operative pain and his or her request for pain medication, in narrative form, in the chart?

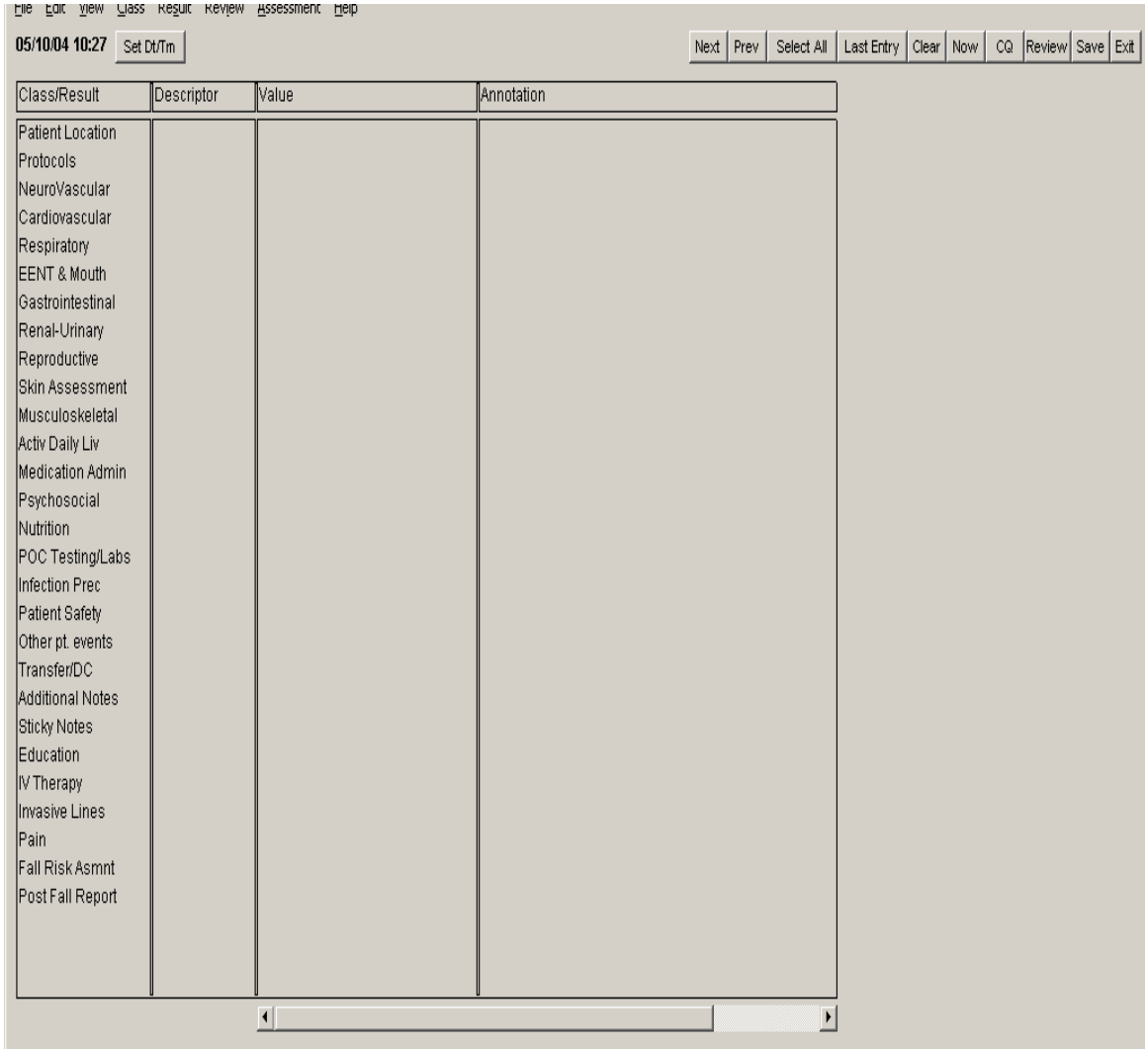
5. Please compare the following pairs of notations, and <u>circle one notation</u> in each pair that <u>you believe</u> represents the correct way to write in a patient's chart.

   There are no right or wrong answers. (At least one notation in each pair came directly from nurses' notes at [redacted].)

"New bag hung"	"Placed new bag"
"Pt doesn't require meds"	"No meds required by Pt"
"Dr. X paged"	"Paged Dr. X"
"Changed pouch and seal"	"Pouch and seal changed"
"Insulin increased to 24 from 18u"	"Increased insulin to 24 from 18u"
"No Q 4 vitals reported"	"Reported no Q4 vitals"
"DC'd Foley"	"Foley DC'd"
"None ordered" (refers to labwork)	"Ordered none" (refers to labwork)
"Pt had seven beats of V-tack reported by telemetry tech"	"Telemetry tech reported Pt had seven beats of V-tack"
"Pt taken to CT scan"	"Took Pt to CT scan"

Appendix B: Screenshots of 3 Different Sections of the CPR Used at the Medical Center

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Last Entry
Clear
Now
CQ
Review
Save
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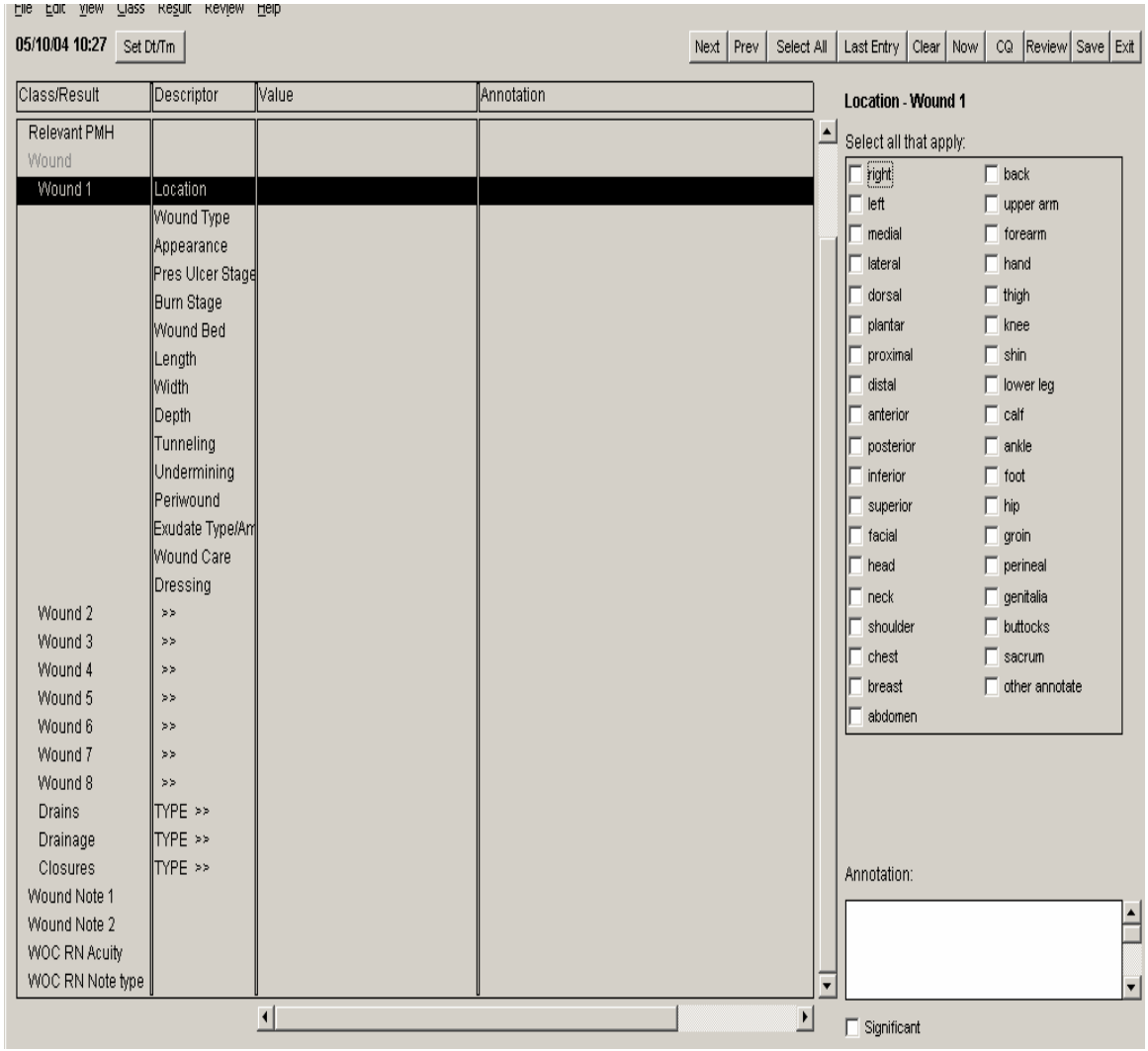
Class/Result
Descriptor
Value
Annotation
Patient Location
Protocols
NeuroVascular
Cardiovascular
Respiratory
EENT & Mouth
Gastrointestinal
Renal-Urinary
Reproductive
Skin Assessment
Musculoskeletal
Activ Daily Liv
Medication Admin
Psychosocial
Nutrition
POC Testing/Labs
Infection Prec
Patient Safety
Other pt. events
Transfer/DC
Additional Notes
Sticky Notes
Education
IV Therapy
Invasive Lines
Pain
Fall Risk Asmnt
Post Fall Report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05/10/04 10:27
Set Dt/Tm
Next
Prev
Select All
Last Entry
Clear
Now
CQ
Review
Save
Exit
Class/Result
Descriptor
Value
Annotation
Relevant PMH
Wound
Wound 1
Location
Wound Type
Appearance
Pres Ulcer Stage
Burn Stage
Wound Bed
Length
Width
Depth
Tunneling
Undermining
Periwound
Exudate Type/Am
Wound Care
Dressing
Wound 2 >>
Wound 3 >>
Wound 4 >>
Wound 5 >>
Wound 6 >>
Wound 7 >>
Wound 8 >>
Drains TYPE >>
Drainage TYPE >>
Closures TYPE >>
Wound Note 1
Wound Note 2
WOC RN Acuity
WOC RN Note type
Location - Wound 1
Select all that apply:
right
left
medial
lateral
dorsal
plantar
proximal
distal
anterior
posterior
inferior
superior
facial
head
neck
shoulder
chest
breast
abdomen
back
upper arm
forearm
hand
thigh
knee
shin
lower leg
calf
ankle
foot
hip
groin
perineal
genitalia
buttocks
sacrum
other annotate
Annotation:
Significant

Appendix C: Translation of Abbreviations

ABD	Abdomen, abdominal
BIL, BILAT.	Bilateral
CT	Computed tomography
D/C	Disconnect
DRSG	Dressing
G TUBE	Gastric tube
INR	Coagulant response time
IV	Intravenous
MD	Doctor
PCA	Patient controlled analgesia
PICC	Peripherally inserted central catheter
PO	By mouth
PT	Patient, can also be physical therapist
Q4	Every 4 hours
TPN	Total parenteral nutrition