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Comprehension of Health Plan Language for Denial of Benefit Claims

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COMPREHENSION OF HEALTH PLAN LANGUAGE FOR DENIAL OF BENEFIT CLAIMS

by

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ERISA requires that plan administrators provide consumers with understandable health plan documents. The present study assessed the readability and comprehensibility of medical necessity and claims procedure clauses. For Study 1, I collected 40 summary plan descriptions from a diverse sample of employers and ran readability tests on the medical necessity and claims procedure clauses. Scores on the Flesch Reading Ease, Flesch Grade Level, and Fog Index indicated that the clauses were, in violation of ERISA's disclosure requirement, written at reading levels beyond those one might expect the average plan participant to possess.

In Studies 2 and 3, employees read either original or redrafted versions of the clauses that received low readability scores in Study 1. Participants completed a comprehension test regarding the clauses. In both studies, participants' overall comprehension accuracy scores (.15 in Study 2 and .19 in Study 3) indicated that participants did not understand the clauses. Contrary to hypotheses, participants who received the redrafted versions of the clauses did not perform better on the

comprehension test than participants who received the original versions of the clauses did.

In Study 3, employees read the clauses either as a reading-to-learn or a reading-to-do task. Contrary to hypotheses, participants in the reading-to-do condition did not perform better on the comprehension test than participants in the reading-to-learn condition. The strength of the medical necessity claim also was manipulated in Study 3, and participants were informed that coverage for a treatment they sought had been denied. Consistent with hypotheses, participants were less likely to appeal a claim the more they felt the health plan was procedurally fair and the more they were satisfied with the health plan ($ß$=-.22, p<.001). In addition, participants were less likely to appeal a claim the more they comprehended the health plan ($ß$ = -.24, p < .01), especially when they had a weak claim ($ß$=.21, p<.05), R^2=.34, F(4, 204)=26.04, p<.001. Therefore, better comprehension led to more appropriate appeal decisions. Findings from this study have implications for enforcing ERISA's disclosure requirement and for reducing healthcare expenditures by reducing the number of lawsuits over plan coverage.

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Comprehension of Health Plan Language for Denial of Benefit Claims

The federal government has elected to regulate the American healthcare industry primarily through informing consumers of their rights and obligations regarding healthcare coverage (Sage, 1999; Sage, 2003). By requiring healthcare insurers and providers to disclose material information to patients, the federal government has attempted to increase consumer knowledge while protecting America's commitment to patient autonomy and self-determination (Sage, 1999). Disclosure requirements, however, cannot have their intended consequences unless consumers can understand and implement the information they receive.

The present study explored consumers' comprehension of their rights regarding denied healthcare benefits, which are governed by the disclosure requirements and civil enforcement mechanisms of the Employee Retirement Income Security Act (ERISA). In Study 1, health plan documents distributed to employees of large corporations and documents received by plaintiffs in recent litigation concerning denied benefits were collected and submitted to readability formulas. In Study 2, employees were tested on their comprehension of their ERISA rights after reading either an original or redrafted version of plan documents. In Study 3, employees read plan documents either without any a priori knowledge or knowing they had been denied coverage. Again consumers were tested on their comprehension of their rights after reading plan documents, and they assessed the fairness of the appeal process.

ERISA

Approximately 63% of the population receive their healthcare benefits from employer-sponsored healthcare plans according to 2001 U.S. Census data. In recognition of the growing number and economic impact of employee benefit plans, Congress enacted ERISA in 1974 to regulate employee pension benefit plans and employee welfare benefit plans, which include employer-sponsored healthcare plans (29 U.S.C. §§ 1001-1461). According to ERISA § 2(b), one of the purposes of ERISA is to protect the interests of heathcare plan participants and beneficiaries by requiring the disclosure of information and providing adequate remedies.

ERISA's Disclosure Requirements. ERISA § 102(a) requires that plan administrators provide plan participants and beneficiaries with a summary plan description (SPD) of the employee benefit plan. Accordingly, the SPD "shall be written in a manner calculated to be understood by the average plan participant, and shall be sufficiently accurate and comprehensive to reasonably apprise such participants and beneficiaries of their rights and obligations under the plan" (29 U.S.C. § 1022(a)). Plans may have a difficult time drafting SPDs because the documents must serve two conflicting purposes (Eddy, 1996). Because the SPD must inform plan participants and beneficiaries of their rights and responsibilities regarding their healthcare plan, it must be precise, which implies that it should be a technical and comprehensive description. However, the SPD also must be comprehensible to plan participants and beneficiaries, which suggests that it should be free of jargon and be as concise as possible. One problem with SPDs is that it may be difficult for plan administrators to communicate effectively through a written document alone the information necessary for participants to

make informed healthcare decisions (Medill, Wiener, Bornstein, & McGorty, 2006; U.S. Department of Labor, 2005).

The SPD typically explains, in three main sections, what benefits will be covered (Eddy, 1996). The first section, often referred to as *coverage categories*, identifies the broad categories of services that the plan will cover (e.g., inpatient hospital services and maternal care). The second section, *coverage stipulations*, explains whether participants will have to share any of the costs of the services and how long they can utilize the services. The third section, often referred to as *coverage criteria*, attempts to distinguish between the particular services that will be covered within a coverage category and those services that will not be covered. Within their coverage criteria, SPDs often inform participants that the healthcare plan will only cover or reimburse care that is "medically necessary," a term of art in health insurance contracts (Bergthold, 1995; Hall & Anderson, 1992). To determine whether plan administrators meet their obligations to make SPDs understandable to the average plan participant, selected clauses from actual SPDs were submitted to readability formulas in Study 1.

Medical Necessity. Medical necessity provisions are the primary legal mechanism health plans use to limit the services they will cover to beneficial and cost-effective treatments (Eddy, 1996). Although medical necessity provisions inform plan participants and beneficiaries about what types of care will be covered (i.e., treatment deemed medically necessary), they often fail to define or describe the process or criteria used to make the determination (Bergthold, 1995; Singer & Bergthold, 2001). According to Sage (2003), health plans use such broad terms as *medical necessity* in health insurance policies "partly from the belief among both insurers and regulators that

unsophisticated consumers are incapable of understanding more detailed contractual provisions" (p. 637).

Although no research has examined consumers' abilities to understand medical necessity clauses, interviews with consumer representatives and their treating physicians revealed dissatisfaction with the amount, clarity, utility, and accessibility of information disclosed (Singer & Bergthold, 2001). Medical necessity disputes are frequently characterized by inconsistent administration and poor communication (Sage, 2003; Singer & Bergthold, 2001). Consumers and policymakers rated improving communication as the most effective and feasible recommendation for improving medical necessity practices (Singer & Bergthold, 2001). Problems obtaining care that Medicaid enrollees or their physicians believed was medically necessary was one of the most frequent complaints in the Consumer Assessment of Health Plans Survey (Venus, Rector, & Shah, 2003). The three sampled health plans received poorer scores on the survey when enrollees reported problems obtaining care that they believed was medically necessary. For two of the three plans, enrollees reported problems obtaining care believed medically necessary significantly more often when they did not find or understand written information from the plan, as compared to when they did find or understand the written information.

A few studies have explored the prevalence and characteristics of medical necessity appeals. In one study, archival analysis of appeals to employer-sponsored healthcare plans revealed that 11% of retrospective appeals (i.e., appeals concerning denial of reimbursement for services already obtained) and 49% of prospective appeals (i.e., appeals concerning denials of access to services) involved medical necessity

disputes (Gresenz, Studdert, Campbell, & Hensler, 2002). In retrospective appeals, plan participants or beneficiaries sought treatment that a utilization review already had determined was medically unnecessary. Prospective appeals primarily addressed whether a treatment should be covered at all, whether an alternative or more conservative treatment should be tried first, or whether the duration or intensity of the treatment was clinically sufficient.

In another study, 37% of prospective appeals involved medical necessity disputes, and 52% of those denials were reversed (Studdert & Gresenz, 2003). Nearly 30% of the appeals dealt with surgical procedures (mostly gastric bypass, breast alteration, and removal of varicose veins), 24% concerned office consultations with specialists (mostly dermatologists, orthopedic surgeons, and psychiatrists), 20% regarded diagnostic tests (mostly magnetic resonance imaging, bone density, and sleep studies), and 12% involved disputes over denied treatment for scars or benign lesions. Therefore, most medical necessity disputes concerned cosmetic or nonessential treatments. Due to the vague and ambiguous nature of medical necessity and evidence that it leads to disputes (Bergthold, 1995; Sage, 2003; Singer & Bergthold, 2001), the present study focused on comprehension of this provision in SPDs. In Studies 2 and 3, a medical necessity dispute led to the opportunity to exercise ERISA civil enforcement rights through a prospective appeal.

ERISA's Civil Enforcement Mechanism. If the plan administrator denies a claim for benefits, under ERISA § 503 the plan administrator must provide the plan participant or beneficiary with adequate notice in writing, "setting forth the specific reasons for such denial, written in a manner calculated to be understood by the participant." Singer and

Bergthold (2001) examined denial letters and found them lacking information regarding who made the decision, what reasons they had for the decision, what evidence they considered for the decision, and what policies they applied toward the decision. Interviewed consumers believed that more informative denial letters would increase public trust in managed care.

ERISA § 503 also requires that healthcare plans establish a reasonable procedure to review participants' and beneficiaries' appeals of denied benefits (29 U.S.C. § 1133). A plan's SPD explains these procedures to participants and beneficiaries. Research indicates that employer-sponsored health plans adjudicate approximately 250,000 appeals annually (Gresenz et al., 2002). Most plans require that a plan participant or beneficiary must exhaust the plan's internal appeal procedures before they can seek external review (Gresenz et al., 2002). It is imperative that plan participants and beneficiaries understand the internal review process for two reasons. First, courts may dismiss claims with prejudice due to failure to exhaust the plan's administrative appeal procedure (*Harrow v. Prudential Ins. Co.*, 2002; *Diaz v. United Agricultural Employee Welfare Benefit Plan & Trust*, 1995). Second, judges are generally limited to reviewing the documents that the plan administrators had before them at the time of the benefit denial (*Firestone Tire & Rubber Co. v. Bruch*, 1989). Because internal appeal procedures have implications on later lawsuits, the present study assessed the point in the process at which participants believe they should seek out legal advice. Stolle and Slain (1997) found that when asked what they would do if they were harmed as a result of a contracted for service, 46% of undergraduate participants would seek legal advice and 29% would handle the situation themselves. SPDs are similar to contracts because they outline the terms of an agreement

between two parties, the plan administrator and the plan participant. As a result, ERISA statutes and litigation are driven by contract law principles.

In an effort to ensure that health plans are medically justified in denying benefits, 41 states and the District of Columbia require that health plans submit their denied claims to independent external review (Mariner, 2002). Because state laws vary on several dimensions (e.g., what rules the reviewers must use and whether the reviewers' decisions are binding), they are beyond the scope of this paper. Instead, the present study focused on the federal mechanism for enforcing plan benefits. ERISA § 502(a)(1)(B) allows healthcare plan participants and beneficiaries to bring civil suits against their plan administrators to recover benefits due to them under the terms of the plan, to enforce their rights under the terms of the plan, or to clarify their rights to future benefits under the terms of the plan.

ERISA litigation, which often favors the health plan administrator over the plan participant, is premised on the assumption that plan participants and beneficiaries comprehend the information they receive in the SPD and, as a result, know their rights regarding their health plan. The present study examined whether this presumption is valid. Recent ERISA litigation suggests that the written language of many SPDs may be inadequate to satisfy the legal standard for participant understanding established under ERISA (*Aetna Health, Inc. v. Davila*, 2004; *Pegram v. Herdrich*, 2000; *Rush Prudential HMO, Inc. v. Moran*, 2002). One of the underlying policy considerations for ERISA's disclosure requirements is that well-informed employees can more effectively protect their rights to plan benefits. However, if SPDs are written above the reading ability of the average plan participant, this objective cannot be met. The present study not only

determined the readability and comprehensibility of SPDs but also whether the comprehensibility of SPDs influenced participants' decisions to exercise their right to appeal coverage denials.

Comprehension

Research suggests individuals do not always read legal documents, and one of the self-reported reasons individuals sign legal documents without reading them first is their perception that the documents are too difficult to understand (Wogalter, Howe, Sifuentes, & Luginbuhl, 1999). A national survey conducted by Louis Harris and Associates (1995) of 1,081 adults found that half of the insured respondents either did not read or merely skimmed materials about their health plans (as cited by Isaacs, 1996). Although getting consumers to read documents governed by ERISA is critical, the present study focused on the average person's ability to comprehend those documents if he or she did read them.

According to the text comprehension theory of van Dijk and Kintsch (1983), there are three levels of comprehension. The most superficial level of comprehension is called the *surface structure*; at this level, individuals encode words and phrases and the linguistic relations between them. Comprehension of the *textbase* involves encoding the semantic and rhetorical structure of the text. The deepest level of comprehension is called the *situation model*. At this level, individuals use their prior knowledge to elaborate on information provided by the text, and they integrate the new information into their existing knowledge base. The completeness of the situation model determines whether an individual merely will have memory for the text or actually will learn from the text (Kintsch, 1994). Whereas *text memory* means one can reproduce the text in some

form, *text learning* means one can apply the information from the text to a novel situation.. In Studies 2 and 3, participants read medical necessity and claims procedure clauses extracted from SPDs to form a hypothetical health plan. They completed a multiple-choice comprehension test on the clauses. This exercise in comprehension was designed to assess participants' text memory of information provided by a health plan.

Because plan participants and beneficiaries may read their SPDs only when they first receive them or after a dispute occurs, the present study examined comprehension under both circumstances. In doing research on readability and comprehension in general, Duffy and Kabance (1982) distinguished between two types of reading tasks. In a *reading-to-learn* task, individuals attempt to store and retain information for use in the future. Thus, when plan participants and beneficiaries read their SPDs when they first receive them, they are engaging in a reading-to-learn task. On the other hand, in a *reading-to-do* task, individuals read with specific objectives and plan to use their newly-acquired information immediately. Plan participants and beneficiaries engage in reading-to-do tasks when they revisit their SPDs once a dispute has arisen. In the present study, all participants engaged in a reading-to-learn task regarding portions of a SPD in Study 2. In Study 3, half the participants engaged in a reading-to-learn task and the other half engaged in a simulated reading-to-do task regarding portions of a SPD. In the reading-to-do task, participants were instructed that their health plan had determined care they had requested was not medically necessary. Because reading-to-do tasks should prompt individuals to pay greater attention to relevant information, process information more selectively, and engage in deeper integration of information (Duffy & Kabance, 1982), I expected comprehension would be better when participants had a priori knowledge that

benefits had been denied. Whereas the reading-to-learn task may only result in text memory, the reading-to-do task should encourage text learning. Text learning requires deeper understanding of the subject matter so that individuals can use newly acquired information in novel environments (Kintsch, 1994). As a result, participants in the reading-to-do task should be better at using the health plan language to answer the multiple-choice question comprehension test.

Health Information and Individual Differences. In general, legal documents tend to be difficult to read due to their length, complexity, and technical nature (Hartley, 2000; Wogalter et al., 1999). Documents governed by ERISA may be particularly hard to comprehend due to the technical nature of healthcare information (Sage, 1999). In an effort to control healthcare spending, the health insurance industry has turned to consumer-driven healthcare (Robinson, 2004). This movement has shifted significantly more responsibility to plan participants for decisions concerning the utilization of healthcare services. Plan participants may find it more difficult to navigate consumer-driven healthcare plans than traditional healthcare plans, and they may find it more difficult to understand the benefits covered by their plans and the rights and responsibilities they have under their plans (Medill et al., 2006). Indeed, studies show that a high percentage of Americans do not understand how healthcare plans operate, which might be a prerequisite for understanding more detailed processes such as benefit denials (Edgman-Levitan & Cleary, 1996; Hibbard & Jewett, 1997; Hibbard, Jewett, Englemann, & Tusker, 1998; Isaacs, 1996; Lubalin & Harris-Kojetin, 1999; McCormack et al., 2002). In addition, consumer-driven healthcare presumes that plan participants will use their health plan documents as a tool for medical decision making, but only four to

six percent of health plan participants trust their healthcare plan to provide the kind of information (e.g., the cost and quality of providers) they need to make informed decisions about the utilization of healthcare services (EBRI/Commonwealth Fund, 2005). Plan participants may be skeptical of the information provided by their health plans due, in part, to their inability to comprehend health plan documents, such as SPDs (Medill et al., 2006).

Furthermore, consumers may struggle to comprehend health information due to their underlying characteristics (Sage, 1999). Several studies have found that consumers' knowledge of health insurance varies depending on individual characteristics. Greater knowledge of health insurance has been associated with higher education (Cafferata, 1984; Hibbard et al., 1998; Lambert, 1980; Marquis, 1983; McCall, Rice, & Sangl, 1986; McCormack et al., 2002), higher income (Hibbard et al., 1998; Lambert, 1980; Marquis, 1983; McCall et al., 1986; McCormack et al., 2002; Rice, McCall, & Boismier, 1991), younger age (Cafferata, 1984; Lambert, 1980; McCall et al., 1986), being White (Marquis, 1983; McCall et al., 1986; McCormack et al., 2002), and being male (Lambert, 1980; McCormack et al., 2002). As a result, the present study asked participants to report their demographic information. In addition, experience with the healthcare industry may influence understanding of how health plans operate. Hibbard and Jewett (1996) suggest that the chronically or severely ill may assess healthcare services differently from healthy consumers. Consequently, the present study assessed participants' experience with the healthcare industry.

Perhaps more central to issues of comprehension, individuals may differ in their health literacy. Functional health literacy measures consumer ability to read and

understand health information (Andrus & Roth, 2002). Over 30% of English-speaking Americans have inadequate or marginal health literacy as measured by the Test of Functional Health Literacy in Adults (TOFHLA) or the Short Test of Functional Health Literacy in Adults (S-TOFHLA; Gazmararian et al., 1999; Gazmararian, Williams, Peel, & Baker, 2003; Parker & Gazmararian, 2003; Williams et al., 1995). For example, a study assessing health literacy found that as many as 60% of consumers could not understand standard consent forms for medical procedures (Williams et al., 1995). The Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs (1999) conducted a comprehensive search of the health literacy literature. Their research indicates that even when controlling for such factors as education level and socioeconomic status, inadequate health literacy is associated with inferior understanding of health-related information along with worse health, less use of preventative health services, and inflated healthcare costs. The wide assortment of available health information, including SPDs, cannot have its intended effect of informing and protecting consumers if consumers lack the health literacy necessary to comprehend it (Bernhardt & Cameron, 2003). The present study assessed the health literacy of a population of employed adults and determined whether their health literacy related to their comprehension of SPDs.

Readability of Healthcare Information. One measure of comprehension is readability assessments. Readability assessments can be used to show that drafters are overestimating document readability (Hochhauser, 1999). Gray, Cooke, and Tannenbaum (1978) found over 77% of 1526 research consent forms, as measured by the widely-used Flesch readability formula, were written at the academic or scientific level.

Several studies have examined the readability of medical consent forms. A study of 60 medical consent forms found that the average readability of the forms was only slightly lower than readability scores for scientific medical journals, as measured by the Flesch readability formula, and that 61% of the forms required college-level reading ability, as measured by the Fry Readability Scale (Morrow, 1980). Another study found that the mean reading level of 88 medical consent forms, as measured by the Fry Readability Scale, was 13.4 years of schooling (LoVerde, Prochazka, & Byyny, 1989).

The present study assessed readability scores for SPD sections on medical necessity and claims procedure. Based on assessments of medical consent forms and surveys of plan participants, I expected to find that SPDs were written above the reading levels the average plan participant is likely to possess. A search of 61 institutional review board websites found that specific readability standards for medical consent forms ranged from 5th- to 10th-grade reading levels (Paasche-Orlow, Taylor, & Brancati, 2003). A finding that SPDs require high levels of reading ability could be problematic given the National Adult Literacy Survey's finding that 20 to 23% of the 191 million adults sampled were functionally illiterate and another 26% had marginal reading skills (Kirsh, Jungeblut, Jenkins, & Kolstad, 1993). According to 2005 U.S. Census data, 16% of adults age 25 or older have not graduated from high school.

Declarative and Procedural Knowledge. The present study not only assessed the readability of a sample of medical necessity and claims procedure clauses but also directly measured comprehension by assessing health consumers' knowledge after reading those clauses. Little research has examined participants' comprehension of their legal rights based on written documents. Morton and Green (1991) evaluated children's

and adolescents' comprehension of terminology related to their rights as inpatients by having participants define vocabulary words, paraphrase statements, and determine whether paraphrased statements were accurate. Comprehension was related to abstract reasoning ability, decision-making ability, intelligence, and age. Tymchuk, Ouslander, and Rader (1986) had elderly residents of a long-term care facility read or listen to versions of a resident's bill of rights and evaluate whether rights were erroneously denied or correctly claimed. Participants who received the simplified language version of the bill of rights demonstrated better comprehension than participants who received the large print, storybook, or videotape versions. The present study is the first to research plan participants' comprehension of their ERISA rights. Based on research concerning health insurance knowledge and comprehension of informed consent forms, I expected to find that participants' comprehension was low.

Because readability scores do not always accurately predict objective comprehension (Black, 1981; Duffy & Kabance, 1982), the present study directly measured comprehension by assessing health consumers' knowledge of their rights after reading SPDs. Several studies have examined comprehension of jury instructions and suggest a methodology for evaluating comprehension of other legal documents (Wiener, Pritchard, & Weston, 1995; Wiener et al., 1998; Wiener et al., 2004). Smith (1994) examines two types of knowledge—*declarative knowledge*, which is meaning- and content-based information stored as semantic concepts, schemata, scripts, or prototypes, and *procedural knowledge*, which operates on the declarative knowledge stored in long- and short-term memory. Wiener et al. (1998, 2004) assessed these two types of knowledge in an effort to gain a more complete understanding of comprehension of jury

instructions. Declarative knowledge was measured by questioning participants about legal concepts, terms, definitions, and rules outlined in the jury instructions. Procedural knowledge was measured by asking participants to determine whether a hypothetical juror followed the jury instructions given the hypothetical facts of a case. The present study assessed participants' declarative and procedural knowledge of their benefits and their rights and responsibilities after reading documents governed by ERISA. Because declarative knowledge is memory for meaning- and content-based information, it is similar to text memory, which simply involves reproduction of text in some form (Kintsch, 1994). Procedural knowledge, on the other hand, is similar to text learning because it involves applying stored information in a novel way. Thus, procedural knowledge may require a deeper level of comprehension than declarative knowledge.

Improving Comprehension. Due to complaints that legal documents are difficult to read and comprehend, several states have taken steps to promote the incorporation of plain language into legal documents (Black, 1981; Wogalter et al., 1999). For example, researchers have demonstrated that the comprehension of jury instructions can be improved through redrafting (Charrow & Charrow, 1979; Elwork, Sales, & Alfini, 1977, 1982). Research focused on insurance information and informed consent forms may provide insight into ways to improve the comprehensibility of SPDs. Researchers were able to improve Medicare beneficiaries' knowledge of their healthcare coverage by supplying beneficiaries with a *Medicare & You* handbook (McCormack et al., 2001; McCormack et al., 2002). Harris-Kojetin, McCormack, Jael, Sangl, and Garfinkel (2001) interviewed and conducted focus groups with publicly- and privately-insured consumers to gather suggestions for improving the comprehensibility of several insurance booklets.

They found that consumers wanted the insurance materials to be shorter, simpler, and clearer.

Several studies have attempted to improve the comprehensibility of informed consent forms. Young, Hooker, and Freeberg (1990) found that individuals scored higher on a multiple-choice comprehension test when a research consent form was written at a lower reading level as compared to a higher reading level. The high reading level consent form, which required grade level 16 reading ability, was reduced to the sixth-grade level, as measured by the Flesch-Kincaid readability formula, by using words with fewer syllables, less technical jargon, and fewer complex sentences. Participants who received the low reading level version reported that the consent form was easier to understand than participants who received the high reading level version. Holding reading level constant, shortening and removing detail from consent forms also has improved their comprehension (Mann, 1984). Masson and Waldron (1994) increased comprehension of several standard legal documents (e.g., mortgages and bank loans) by removing or replacing archaic words and legal terms and simplifying sentence structure.

In a series of experiments, Wogalter et al. (1999) examined factors related to the comprehension of legal documents. Participants in the first two studies suggested and rated highly the following recommendations for improving comprehension of legal documents: decreasing technicality, giving explanations, providing definitions, and giving examples. Wogalter et al. were able to improve comprehension and readability of a conventional consent form by enlarging the print, shortening the length, changing the tone from third to first person, and reducing the technical nature of the document. Participants who received the improved consent form, as compared to the conventional

form, reported that they read it more carefully, understood the form better, and were more informed about their rights. These participant perceptions were correlated with their objective comprehension.

The present study incorporated the mechanisms employed by Wogalter et al. (1999) to improve comprehension of SPD provisions. Based on the success of redrafting other legal documents, I expected to find that participants would demonstrate greater comprehension of health plan requirements and ERISA rights when they read a redrafted, as compared to an original, SPD. Based on Duffy and Kabance's (1982) reasoning that redrafting facilitates comprehension only when readers are required to integrate and organize the information (i.e., when they must summarize the information or when they must apply a procedure) and because appealing benefit denials is a procedural process, I expected comprehension to improve more when participants engaged in a reading-to-do task (i.e., when they knew a benefit had been denied) as opposed to a reading-to-learn task.

One of the policy considerations underlying ERISA's disclosure requirement is to make employers and insurers who sponsor plans feel more accountable for their compliance with ERISA and the terms of their plans. Employers and plan administrators may be motivated to improve the comprehension of their SPDs if plan participants and beneficiaries' decisions to appeal coverage denials are influenced by their knowledge of their rights according to the terms of their healthcare plans. Increased comprehension could lead to fewer appeals because participants would know what to and what not to expect from their plan administrators. On the other hand, increased comprehension could lead to more appeals because participants would be better equipped to begin the appeal

process. In Study 3, participants reacted to being denied healthcare benefits they sought from a hypothetical health plan. I expected comprehension to influence participants' decisions to appeal benefit denials, such that participants would make sounder appeal decisions the more they understood the health plan. Whereas the multiple-choice comprehension test was designed to assess participants' text memory, the simulated appeals process was designed to assess participants' text learning of the information provided by a health plan (Kintsch, 1994). The appeals process required participants to apply information they read from the health plan to the novel situation of challenging the health plan's decision. Thus, successful completion of the appeals process may require a deeper understanding of the material than successful completion of the comprehension test. The strength of the medical necessity claim was manipulated. Participants either had a strong or weak claim for appealing the health plan's decision to deny benefits. I hypothesized that better comprehension would be associated with an increased propensity to appeal a strong claim and a decreased propensity to appeal a weak claim.

Plan Satisfaction. The decision to appeal benefit denials may be mediated not only by comprehension of SPDs but also by satisfaction with the plan. According to Sage (2003), "Public trust in the health care system has collective importance, and fair deliberative procedures reassure individuals as consumers, patients, and citizens that health plans, even as private actors, are seeking a reasonable balance between access to (or quality of) health care and its costs" (p. 621-622). Procedural justice concerns the fairness of the process used to come to a decision (Tyler, 1989). The present study focused on participants' satisfaction with the health plan and with the ERISA appeals process.

Because healthcare plans follow a procedure for denying benefits, studies on procedural fairness may provide insight into perceptions of health plans and the claims denial process. Lind and Tyler (1988) proposed that reactions to decisions are influenced by perceptions of procedural fairness, independent of outcomes. Control, neutrality, social standing, and trust influence perceptions of procedural justice (Tyler, 1989). Control indicates that each side had an influence on the decision, neutrality occurs when decisions are made in an unbiased manner, trust depends on the relationship between the individual and the authority figure making the decision, and social standing reflects an individual's assessment of their status in the group. Tyler (1989) suggests that individuals will perceive decisions as fairer when they have some choice and voice in the decision-making process.

Hughes and Larson (1991) extended the principle of procedural fairness to the healthcare setting. Participants rated the procedural fairness of prescription selection when a physician either asked or failed to ask a patient's preferences regarding several characteristics of the medication. Hughes and Larson found that participants rated the prescription decision as more fair when the patient was given the chance to voice his preferences, independent of the outcome of the decision.

Murphy-Berman, Cross, and Fondacaro (1999) asked adults enrolled in health plans to recall a time over the past 12 months when their healthcare administrator made a decision regarding the care they were able to receive. After describing this experience, respondents reported their perceptions of the procedural fairness of the situation. Respondents who rated the situation as more procedurally fair expected to have a better relationship with their health plan administrator, to have a closer relationship with their

health plan group, to have more status in their health plan group, and to feel better about themselves.

To improve participant satisfaction with their health plans, the Ethical Fundamental Obligations Report Card Evaluations program suggests that coverage decisions ought to be transparent, participatory, equitable and consistent, sensitive to value, and compassionate (Wynia et al., 2004). Research suggests that individuals are more likely to accept undesirable outcomes when they perceive the process that generated the outcomes as fair (Lind & Tyler, 1988). If individuals perceive a decision-making process as unfair, they may be more likely to take action against the decision. Skarlicki and Folger (1997) investigated the relationship between workers' perceptions of procedural fairness and organizational retaliation behavior. They found that perceptions of procedural fairness did not influence claiming behavior. In a study of workers' compensation claims, Roberts and Markel (2001) assessed perceptions of fairness shortly after company physicians reported an injury and one year later. Again, perceptions of procedural fairness did not influence claiming behavior.

The present study determined whether this finding extended to the decision to file ERISA denial of benefit claims. Perhaps, procedural fairness factors relate to perceptions of procedural fairness but do not predict behavior. The present study measured both perceptions of procedural fairness and appeal behavior. In spite of Skarlicki and Folger's results and Roberts and Markel's findings, I expected participants to appeal denials more often when they perceived the decision-making process as procedurally unfair and reported being less satisfied with the health plan. In addition, I expected comprehension to influence participants' perceptions of the health plan, but it was unclear in which

direction. Increased comprehension could lead to greater plan approval because participants would know what to and what not to expect from their plan administrators. On the other hand, increased comprehension could lead to more dissatisfaction because participants would realize the limitations of the health plan coverage and the administrative obstacles they would have to overcome to get the results they wanted.

Present Study

The present study explored consumers' comprehension of their benefits and their rights and responsibilities regarding denied healthcare benefits and investigated consumers' perceptions of fairness and decision preferences in hypothetical situations where coverage had been denied. In Study 1, the medical necessity and claims procedure clauses of SPDs were analyzed using readability formulas. Based on assessments of medical consent forms, I expected to find that these SPD clauses were written at reading levels beyond those one might expect the average plan participant to possess.

In Study 2, employees were tested on their comprehension of their rights after reading either original or redrafted versions of medical necessity and claims procedure clauses. Participants also completed a health literacy test and reported their personal health history and insurance status. I hypothesized that employees with higher health literacy and more experience with the healthcare industry would demonstrate greater comprehension than employees with lower health literacy and less familiarity with the healthcare industry. More importantly, I expected to find that participants who received the redrafted clauses would demonstrate better comprehension than participants who received the original clauses would.

In Study 3, employees either read plan documents without any a priori knowledge (reading-to-learn) or knowing they had been denied coverage (reading-to-do). Claim strength was manipulated as well. Participants were tested on their comprehension of their rights after reading plan documents, and they reported their satisfaction with the health plan and the appeals process. I expected comprehension to be better for the redrafted clauses, as compared to the original clauses, and for the reading-to-do task, as compared to the reading-to-learn task. I also expected comprehension, perceptions of fairness, and the strength of the claim to predict the decision to appeal. I hypothesized that better comprehension would be associated with an increased propensity to appeal a strong claim and a decreased propensity to appeal a weak claim. I also expected participants to appeal the plan administrator's decision more often when they perceived the decision-making process as procedurally unfair and when they were less satisfied with the health plan.

Study 1

Method

Materials. As part of a larger project (Medill et al., 2006) that examined six types of clauses in SPDs, I collected and tested the medical necessity and claims procedure clauses from 40 health plan SPDs. The study sample included a diverse geographic range of employers from across the United States. Both large employers and small employers representing a variety of industrial sectors were included in the study sample. The study sample included both healthcare plans sponsored by a single employer for its workers and multiemployer healthcare plans sponsored jointly by employers and labor unions for collective bargaining unit employees. The study sample also included different types of

healthcare plans, including traditional indemnity healthcare plans offered through insurance companies, employer self-insured healthcare plans with a third party administrator and a utilization review manager, managed care plans, and one high-deductible healthcare plan with a corresponding health savings account feature.

The majority of the SPDs were obtained by conducting a random search of the internet. SPDs also were obtained from employees who participated in plans. A few of the SPDs were obtained from attorneys who had represented plan participants in recent federal court litigation where the language of the SPD was related to the issue in dispute.

Procedure. Two experts in ERISA coded each SPD. A law school professor with a combined total of fourteen years of private legal practice and academic research experience with ERISA coded all of the SPDs in the sample. Three other expert readers, with 3.5 to 6 years of private legal practice experience with ERISA, each coded a portion of the entire sample set of SPDs. All four coders are considered experts on ERISA-regulated healthcare plans by their peers in the legal profession.

Each expert reader received a detailed coding instruction book (see Appendix A for general and specific instructions for the medical necessity and claims procedure clauses) that outlined the criteria for the reader to use in determining what language in the SPD should be identified as part of a clause. The coding instruction book included the legal definition and function of the clause along with appropriate citations to the relevant statutory provisions of ERISA. The coding instruction book gave specific guidance to the expert readers regarding what language should be included as part of the clause. The coding instruction book also told the expert readers what language should be excluded from relevant clauses when appropriate.

I assessed the readability of the medical necessity and claims procedure clauses that were identified by the expert readers. Because all of the readers are considered experts on ERISA-regulated healthcare plans, any language that was identified by an expert reader as part of a tested clause was subjected to a readability assessment. This procedure guaranteed that the portions of the SPDs that were analyzed for readability were maximally inclusive and did not depend on the judgments of a single expert reader.

Inter-rater reliability. However, I did calculate inter-rater agreement among the expert coders. The primary coder served as the standard for calculating agreement with each of the three secondary coders. I computed agreement as the number of paragraphs that both raters marked off for a given clause, divided by the total number of paragraphs that either coder marked as part of that clause. To illustrate this procedure, assume that the first expert reader identified 10 paragraphs as constituting a claims procedure clause and the second expert reader identified 9 paragraphs. The two expert readers agreed upon 8 paragraphs (i.e., they both marked off the same 8 paragraphs), but they disagreed on three others. For this clause, the inter-rater agreement would equal 8/11, or 72%. If the coders agreed that a particular plan lacked any relevant clause, agreement was assigned a value of 100% for this analysis.

For medical necessity clauses, inter-rater reliability ignoring differences across SPDs in the number of observed paragraphs was 42% (*SD* = 31%) and inter-rater reliability weighing the number of observed paragraphs was 31%. For claims procedure clauses, inter-rater reliability ignoring differences in the number of observed paragraphs was 83% (*SD* = 24%) and inter-rater reliability weighing the number of observed paragraphs was 85%. Although medical necessity clauses were substantially more

difficult to identify reliably than claims procedure clauses, these results indicate that overall even trained ERISA experts struggle to reliably determine the language in SPDs that describes the benefits covered by the plan and the participant's rights and responsibilities under the plan (Medill et al., 2006). As described above, to maximize inclusiveness, any language that was identified by an expert reader as part of a tested clause was included in the readability analysis.

Measures. The medical necessity and claims procedure clauses were submitted to three widely used readability measures: the Flesch Reading Ease formula, Flesch Grade Level formula, and Fog Index. The Flesch Reading Ease formula yields a readability score between 0 and 100 with lower scores indicating the material is more difficult to comprehend (Flesch, 1948). The formula for the Flesch Reading Ease score takes into account average sentence length and average number of syllables per word. The resulting scores are associated with grade levels (e.g., 0-30 = college graduates; 30-50 = college years; 50-60 = 10^{th}-12^{th} graders). The related Flesch Grade Level indicates the minimum education level required for the reader to be able to understand the document (Kincaid, Fishbume, Rogers, & Chissom, 1975). The formula for the Flesch Grade Level is also based on average sentence length and average number of syllables per word. The Flesch Grade Level formula uses different coefficients from the Flesch Reading Ease Formula, and the output is stated in terms of grade level. The Fog Index uses different indicators to measure language complexity. The Fog Index weighs the total number of words, words of three or more syllables, and sentences (Gunning, 1968). Commentary accompanying the Fog Index recommends that technical material should score no higher than 14,

business material should score no higher than 12, and clerical material should score no higher than 8 (Thomas, Hartley, & Kincaid, 1975).

Results and Discussion

The results of the readability analyses are set forth in Table 1 for the medical necessity clauses and Table 2 for the claims procedure clauses.

Table 1. Average Objective Readability of Medical Necessity Clauses

	M	*SD*	Range
Flesch Reading Ease	32.4	7.8	15-50
Flesch Grade Level	13.0	1.8	9.9-17.2
FOG Index	16.0	2.1	10.9-20.9

Table 2. Average Objective Readability of Claims Procedure Clauses

	M	*SD*	Range
Flesch Reading Ease	47.6	8.3	31-65
Flesch Grade Level	11.3	2.1	7.4-16.4
FOG Index	13.9	2.2	9.7-18.9

Consistent with assessments of medical consent forms, I found that both types of clauses were written at reading levels beyond those one might expect the average plan participant to possess. The Flesch Reading Ease mean of 32.4 for medical necessity and 47.6 for claims procedure indicates that the language of the clauses tested is written at a

college reading level. The related Flesch Grade Level indicates that the minimum education level required for the reader to be able to understand the language of the average clause is 13.0 for medical necessity and 11.3 for claims procedure (with 12 being equivalent to a high school degree). The Fog Index mean of 16.0 for medical necessity and 13.9 for claims procedure is at or higher than the recommended level for technical material (14) and higher than the recommended level for business material (12; Thomas et al., 1975).

These findings indicate that some SPDs may not comply with ERISA § 102(a)'s requirement that SPDs "shall be written in a manner calculated to be understood by the average plan participant" (29 U.S.C. § 1022(a)). Furthermore, the federal law's purpose of providing participants and beneficiaries with full disclosure of relevant information concerning their health plans may be frustrated by the high level of reading ability needed to understand SPDs. Although ERISA does not detail the standards by which understanding should be measured, it does require that SPDs be understandable to the average employee. To date, the reading ability of the average employee has not been determined. However, the National Adult Literacy Survey found that 20 to 23% of adults are functionally illiterate and another 26% have marginal literary skills (Kirsh et al., 1993). Furthermore, 16% of adults age 25 or older have not graduated from high school according to 2005 U.S. Census data.

The finding from the present study that some SPDs require college-age reading ability, if replicated, could have serious implications. Because this finding is based on a small sample of SPDs, these results should be interpreted with caution. Nevertheless, SPDs are the primary source of information for participants in employer-sponsored

healthcare plans. In this age of consumer-driven healthcare, it is critical that individuals be able to understand the benefits covered by their plans and the rights and responsibilities they have under their plans. Along these lines, many institutional review boards require that medical consent forms be written at 5th- to 10th-grade reading levels (Paasche-Orlow et al., 2003). The present study indicates that some SPDs are written well above this standard and likely fail to meet ERISA's requirement that SPDs be understandable to the average plan participant.

Study 2

In Study 2, employees read either original or redrafted versions of medical necessity and claims procedure clauses. Participants were tested on their comprehension of the clauses, and they completed a health literacy test. Participants also reported their personal health history and insurance status. I hypothesized that employees with higher health literacy and more experience with the healthcare industry would demonstrate greater comprehension than employees with lower health literacy and less familiarity with the healthcare industry. More importantly, I expected to find that participants who received the redrafted clauses would demonstrate better comprehension than participants who received the original clauses would.

Method

Participants. Employed adults (N = 400), who had volunteered to participate in web-based research through www.studyresponse.com, were recruited through an email which contained a link to the study website. Participants who completed the study were entered into a lottery to receive gift certificates for their participation. Of the 400

employed adults recruited to participate in the study, 88 individuals (22%) completed the study.

Materials. I chose the clauses for Study 2 and 3 based on the readability scores found in Study 1. Reliability analyses on z-scores from each readability measure (i.e., Flesch Reading Ease formula, Flesch Grade Level formula, and Fog Index) produced alpha coefficients of .94 for the medical necessity clauses and .98 for the claims procedure clauses. These results demonstrate that these three indicators of readability were measuring the same construct. A single standard score was created by computing the average of the transformed readability scores.

For each clause, the standard scores were divided into quartiles. To increase generalizability, two medical necessity and two claims procedure clauses that were representative (e.g., average word count, contained all sections of the clauses) of each type of clause were chosen from the 10 medical necessity and 10 claims procedure clauses with the poorest readability scores.

To create the redrafted clauses, complex sentences were broken up into simpler sentences, long words were made into shorter words, the tone was changed from third to second person, and the technical nature of the documents was reduced by eliminating jargon (Wogalter et al., 1999). Although readability scores are also dependent on word count, it is difficult to reduce word count without changing meaning, so I attempted to keep the word count similar for the original and redrafted versions. The redrafted clauses also were improved in ways, such as enlarging the font, reordering the text, and indenting subcategories, that would not change the readability scores. The original and redrafted clauses are presented side by side in Appendix B; although the redrafted clauses were

displayed in a larger font than the original clauses on the website, the redrafted and original clauses are presented in the same font size in Appendix B for ease of comparison. A professor of ERISA law compared the original and redrafted documents to ensure the substantive content had remained the same. The readability scores for the original and redrafted clauses are presented in Table 3 for the medical necessity clauses and in Table 4 for the claims procedure clauses.

Table 3. Objective Readability of Selected Medical Necessity Clauses

	Plan 1		Plan 2	
	Original	Redrafted	Original	Redrafted
Flesch Reading Ease	28	37	21	37
Flesch Grade Level	14.3	12.6	14.4	11.5
FOG Index	17.2	15.5	17.0	14.0
Words	859	900	774	776
1 syllable	446	490	395	427
≥3 syllables	226	208	241	201
Difficult Words	202	186	202	165
Syllables	1618	1617	1543	1432
Sentences	44	50	47	57

Table 4. Objective Readability of Selected Claims Procedure Clauses

	Plan 1		Plan 2	
	Original	Redrafted	Original	Redrafted
Flesch Reading Ease	31	50	34	47
Flesch Grade Level	16.4	11.5	15.5	12.0
FOG Index	18.9	14.2	18.3	14.7
Words	2635	2656	1772	1834
1 syllable	1566	1721	1075	1171
≥3 syllables	525	449	350	313
Difficult Words	458	386	313	280
Syllables	4526	4247	3024	2983
Sentences	88	126	63	85

Procedure. Participants were randomly assigned to one of the versions of the clauses (original v. redrafted). They read one medical necessity and one claims procedure clause. Participants completed the study over the internet. After providing informed consent, participants were instructed to read the sections of a Health Plan as if they were members of the Health Plan. They were informed they would be questioned about the Health Plan and the Health Plan would be available for them to refer back to.

After reading the medical necessity and claims procedure clauses, participants answered demographic questions.

As a manipulation check, participants rated their agreement with the following statements on 5-point scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*): (1) the Health Plan sections on coverage (medical necessity) were easy to understand; (2) I understood the Health Plan sections on coverage (medical necessity); (3) the Health Plan sections on claims were easy to understand; and (4) I understood the Health Plan sections on claims.

Then, participants completed a comprehension test on the Health Plan (see Appendix C), during which they were able to refer back to the clauses. The questionnaire assessed declarative knowledge (e.g., when is care considered medically necessary?) and procedural knowledge (e.g., do participants have to exhaust the plan's administrative appeal process?) through multiple-choice questions. Although the questions set out in Appendix C are grouped by clause and question type, the order of questions presented to participants was mixed.

Based on Wiener et al.'s (1998, 2004) methods, responses to the comprehension test were coded as follows: correct responses (hits) = 1; incorrect responses (misses) = -1; and *I did not understand the Health Plan material regarding this question* (do not know) responses = 0. This method of calculation rewarded hits, neutralized *do not know* responses, and penalized misses. Accuracy averages could range from 1.00 (all hits) to -1.00 (all misses). I calculated an overall comprehension accuracy score and subscale comprehension accuracy scores. Each subscale score was calculated by summing up the scores of the items on that subscale and dividing by the total number of items on that subscale.

Following the comprehension test, participants completed the reading comprehension section of the short version of the Test of Functional Health Literacy in Adults (S-TOFHLA; Baker, Williams, Parker, Gazmararian, & Nurss, 1999; see Appendix D). The comprehension section of the S-TOFHLA has internal consistency ($\alpha = .97$) and is strongly correlated ($r = .81$) with the Rapid Estimate of Adult Literacy in Medicine (REALM), similar to the full version of the TOFHLA ($r = .84$; Baker et al., 1999). For this test, participants read prose passages written at grade levels of 4.3 and 10.4, as measured by the Gunning-Fox index. The passages are instructions for preparation for an upper gastrointestinal tract radiograph procedure and the patient "Rights and Responsibilities" section of the Medicaid application, respectively. Comprehension is measured by a 36-item test using the modified Cloze procedure; that is, every fifth to seventh word in the passages is missing, and participants must choose from four multiple choice options. Correct responses receive one point, and incorrect responses receive no points. Scores from 0 to 16 indicate inadequate health literacy, such that individuals will often misread the simplest materials, including prescription bottles and appointment slips. Scores from 17 to 22 indicate marginal health literacy, such that individuals will perform better on the simplest tasks but will have difficulty with more complex material, including insurance information about their rights and responsibilities. Scores from 23 to 36 indicate adequate health literacy, such that individuals will successfully complete most tasks necessary to function in the healthcare setting but may have difficulty with materials written above the 10^{th}-grade reading level.

Then participants provided information about their health history. Participants were asked to rate their health status as poor, fair, good, or excellent. Participants were

asked whether they have at least one chronic disease, whether they were hospitalized for inpatient or outpatient treatment in the last year, and if hospitalized, how many days they were hospitalized. Participants also were asked whether they have seen a doctor in the last two years; if so, how many doctors they have seen in the last two years; and whether they have seen a specialist in the last two years.

In addition, participants were asked questions concerning their health insurance status. Participants indicated whether they have health insurance, whether they have privately-funded health insurance (e.g., HMOs, PPOs, fee-for-service), whether they have publicly-funded health insurance (e.g., Medicaid, Medicare), whether they have health insurance through their employer or a family member's employer, and whether they have supplemental health insurance. If they had health insurance, participants reported the number of years they have had health insurance. Participants also were asked whether they have sought pre-authorization for coverage, submitted a pre-service claim, submitted a post-service claim, appealed a denial of coverage to their health plan, or appealed a denial of coverage through a lawsuit.

Results and Discussion

Participants ($N = 6$) who spent less than five minutes answering study questions were excluded from data analyses, leaving 81 participants. There were 36 participants in the original clause condition, and 45 participants in the redrafted clause condition. Participants dropped from data analyses were not more likely to be in the original clause condition than in the redrafted clause condition, $\chi^2(1, N = 87) = .07$, $p = .79$. Participants included in analyses spent an average of 1040.14 seconds (~17 minutes; $SD = 1768.61$) answering questions. The demographic characteristics of the 81 participants included in

subsequent analyses are presented in Table 5. There was only one difference in comprehension across demographic groups. Older participants had better comprehension, $r(81) = .37$, $p < .01$, which is inconsistent with the finding that greater knowledge of health insurance has been associated with younger age (Cafferata, 1984; Lambert, 1980; McCall et al., 1986). Because 96.3% of participants demonstrated adequate health literacy ($M = 34.10$, $SD = 3.66$, Range = 13-36) as measured by the S-TOFHLA, I was not able to use health literacy in subsequent analyses.

Table 5. Participant Demographic Information

Gender	35.9% men
Race	82.7% Caucasian
Age	$M = 40.31$ years
Education	51.9% some college or more
Household Income	43.8% less than $50,000
Work for pay	97.5%
Work > 30 hrs a week	86.4%
States represented	29

Plan Differences. To determine whether the clauses from Health Plan 1 and 2 could be combined for analyses, I compared the scores on the appropriate comprehension subscales for each Plan. For the medical necessity clauses, scores of participants who received the original version of Plan 1 ($M = .14$, $SD = .42$; $M = -.10$, $SD = .38$) did not differ on the declarative and procedural question subscales from scores of participants

who received the original version of Plan 2 (*M* = .28, *SD* = .33; *M* = -.14, *SD* = .36), *t*s(1, 34) = 1.10, .33, *p*s = .28, .74. Scores of participants who received the redrafted version of Plan 1 (*M* = .23, *SD* = .36; *M* = .06, *SD* = .31) did not differ on the declarative and procedural question subscales from scores of participants who received the redrafted version of Plan 2 (*M* = .31, *SD* = .32; *M* = .06, *SD* = .39), *t*s(1, 43) = .75, .09, *p*s = .46, .93. Because scores on the declarative and procedural questions did not differ depending on whether participants read the medical necessity clause from Plan 1 or Plan 2, the Plans were collapsed for analyses.

For the claims procedure clauses, scores of participants who received the original version of Plan 1 (*M* = .05, *SD* = .16; *M* = .39, *SD* = .25) did not differ on the declarative and procedural question subscales from scores of participants who received the original version of Plan 2 (*M* = .02, *SD* = .33; *M* = .35, *SD* = .26), *t*s(1, 34) = .31, .52, *p*s = .76, .61. Scores of participants who received the redrafted version of Plan 1 (*M* = .05, *SD* = .31; *M* = .31, *SD* = .31) did not differ on the declarative and procedural question subscales from scores of participants who received the redrafted version of Plan 2 (*M* = .12, *SD* = .44; *M* = .21, *SD* = .28), *t*s(1, 43) = .61, 1.18, *p*s = .54, .25. Because scores on the declarative and procedural questions did not differ depending on whether participants read the claims procedure clause from Plan 1 or Plan 2, the Plans were collapsed for analyses.

Manipulation Checks. To test whether participants detected a difference in the readability of the original and redrafted clauses, t-tests were used to examine perceptions of understandability. Participants were asked to rate how easy it was to understand the clauses and how well they understood the clauses. For the medical necessity clauses,

participants in the redrafted clause condition (M = 3.40, SD = 1.12) did not rate the clause they read as any easier to understand than did participants in the original clause condition (M = 3.36, SD = 1.05) did, $t(1, 79) = .16$, $p = .87$, $d = .04$. Similarly, participants in the redrafted clause condition (M = 3.60, SD = 1.07) did not claim that they understood the clause they read any better than did participants in the original clause condition (M = 3.64, SD = .87) did, $t(1, 79) = .18$, $p = .86$, $d = .04$.

For the claims procedure clauses, participants in the redrafted clause condition (M = 3.16, SD = 1.15) did not rate the clause they read as any easier to understand than did participants in the original clause condition (M = 3.37, SD = 1.06) did, $t(1, 78) = .86$, $p = .39$, $d = .19$. Similarly, participants in the redrafted clause condition (M = 3.38, SD = 1.09) did not claim that they understood the clause they read any better than did participants in the original clause condition (M = 3.58, SD = .94) did, $t(1, 79) = .90$, $p = .37$, $d = .20$.

Because the manipulation check failed when participants saw only one version of the clauses, I ran a post-hoc study to establish that the redrafted clauses were more readable than the original clauses when participants read both versions. Undergraduates (N = 25) and employees (N = 21) were instructed to compare the readability of the original and redrafted clauses. Participants were given one of the versions (original or redrafted) of either Plan 1 or Plan 2's medical necessity clause followed by the other version; the order of presentation was counterbalanced. Then participants were asked to rate which clause was easier to read on a 7-point scale, ranging from 1 (*Clause A was much easier to read*) to 7 (*Clause B was much easier to read*), and which clause was more understandable on a 7-point scale, ranging from 1 (*Clause A was much more*

understandable) to 7 (*Clause B was much more understandable*). Participants also were asked to rate which clause they found preferable on a 7-point scale, ranging from 1 (*Strongly prefer Clause A*) to 7 (*Strongly prefer Clause B*). On all the scales, 4 was labeled *Neutral*. Then, participants repeated the same procedure with one of the versions (original or redrafted) of either Plan 1 or Plan 2's claims procedure clause.

Because the reliability coefficients for the three questions was high regarding the medical necessity clauses ($\alpha = .94$) and the claims procedure clauses ($\alpha = .90$), the measures were combined into one readability index. The ratings for each of the questions and the combined readability index are presented in Table 6 and 7. As reported here, higher scores indicate that the redrafted clauses were easier to read, easier to understand, and more preferable.

Table 6. Average Subjective Readability of Medical Necessity Clauses

	Plan 1 (N = 23)	Plan 2 (N = 23)	Total (N = 46)
	M (*SD*)	*M* (*SD*)	*M* (*SD*)
Readable	6.00 (1.48)	5.22 (1.70)	5.61 (1.63)
Understandable	5.83 (1.83)	4.87 (1.52)	5.35 (1.73)
Preferable	6.04 (1.58)	5.48 (1.70)	5.76 (1.65)
Readability Index	5.96 (1.54)	5.19 (1.56)	5.57 (1.58)

Table 7. Average Subjective Readability of Claims Procedure Clauses

	Plan 1 (N = 22)	Plan 2 (N = 23)	Total (N = 45)
	M (SD)	M (SD)	M (SD)
Readable	5.73 (1.61)	5.57 (1.70)	5.64 (1.64)
Understandable	5.41 (1.22)	5.65 (1.47)	5.53 (1.34)
Preferable	5.77 (1.41)	5.78 (1.35)	5.78 (1.36)
Readability Index	5.64 (1.32)	5.67 (1.37)	5.65 (1.33)

The means indicate that participants rated the redrafted clauses on average as slightly to somewhat more readable, understandable, and preferable than the original clauses. There were no significant differences between Plan 1 and Plan 2 for the medical necessity clauses or the claims procedure clauses. An independent t-test was run comparing the readability index score to the neutral point (i.e., 4) on the scale of the pilot questions. The t-test revealed that participants rated the redrafted clauses as more readable than the original clauses for both the medical necessity clauses, $t(1, 45) = 6.74$, $p < .001$, $d = 2.00$, and the claims procedure clauses, $t(1, 44) = 8.35$, $p < .001$, $d = 2.49$. These findings indicate that, despite the manipulation check failure, the redrafting did affect the clauses' readability and comprehensibility.

Redrafting. In Study 2, participants completed a comprehension test to demonstrate their understanding of the medical necessity and claims procedure clauses. The mean overall comprehension accuracy score across all test items was .15 (SD = .20), which indicates that participants made slightly more correct responses than incorrect

responses. Although .15 is not very far above the chance level of zero, an independent t-test showed that this difference was significant, $t(1, 80) = 6.78$, $p < .001$, $d = 1.52$. On average, 52.98% of participants' responses were hits, 37.68% were misses, and 9.34% were *do not know* answers. Thus, participants demonstrated poor comprehension of their benefits and their rights and responsibilities regarding the Health Plan. This result is similar to the poor comprehension (.21) found in Wiener et al.'s (1998) Juror Comprehension Survey, where 56% of participants' responses were hits, 33.5% were misses, and 10.5% were *do not know* answers.

I hypothesized that participants who received the redrafted clauses would demonstrate better comprehension than participants who received the original clauses. A repeated measures ANOVA was performed with clause subject (i.e., medical necessity and claims procedure) and knowledge type (i.e., declarative and procedural) as within-subjects factors and clause (original v. redrafted) as the between-subjects factor. The ANOVA revealed no main effect for clause, $F(1, 79) = .93$, $p = .34$, $\eta_p^2 = .01$. Inconsistent with predictions, redrafting did not improve comprehension. This finding is discussed further with results from Study 3.

There was a significant main effect for clause subject, $F(1, 79) = 6.48$, $p < .05$, $\eta_p^2 = .08$, such that participants had better knowledge for the claims procedure clauses ($M = .18$, $SD = .24$) than for the medical necessity clauses ($M = .11$, $SD = .26$). This finding suggests that the claims procedure questions may have been easier than the medical necessity questions. There was a significant 2-way interaction between clause subject and knowledge type, $F(1, 79) = 64.97$, $p < .001$, $\eta_p^2 = .45$; the means for the different subscales are presented in Table 8.

Table 8. Scores on Comprehension Test Subscales

	M	*SD*	Range
Medical Necessity			
Declarative	.25	.35	-.71-.71
Procedural	-.02	.36	-.71-.86
Claims Procedure			
Declarative	.06	.33	-.78-1.00
Procedural	.31	.28	-.56-.89

Participants were more accurate when medical necessity questions were directed at declarative knowledge rather than procedural knowledge, $t(1, 80) = 4.99$, $p < .001$, $d = 1.12$, and when claims procedure questions were directed at procedural knowledge rather than declarative knowledge $t(1, 80) = 5.66$, $p < .001$, $d = 1.27$. This finding makes sense given the nature of the clauses; medical necessity clauses contain content-based information, and claims procedure clauses contain applications of concepts. Wiener et al. (1998) also found differences in participants' comprehension of jury instructions depending on question type, such that participants performed better on declarative knowledge questions than on procedural knowledge questions.

In addition, there was a significant 2-way interaction between clause subject and clause, $F(1, 79) = 4.60$, $p < .05$, $\eta_p^2 = .06$. Redrafting improved comprehension for the medical necessity clauses, $t(1, 79) = 2.01$, $p < .05$, $d = .45$, but not for the claims

procedure clauses, $t(1, 79) = .40$, $p = .69$, $d = .09$. The average scores for the clause subjects and the subscales as a function of clause are shown in Table 9.

Table 9. Scores on Comprehension Test Subscales as a Function of Clause

	Original ($N = 36$)	Redrafted ($N = 45$)
	M (*SD*)	*M* (*SD*)
Medical Necessity	.05 (.27)	.16 (.24)
Declarative	.23 (.37)	.26 (.34)
Procedural	-.13 (.36)	.06 (.34)
Claims Procedure	.20 (.21)	.17 (.26)
Declarative	.03 (.28)	.08 (.37)
Procedural	.36 (.25)	.26 (.30)

There also was a significant 3-way interaction between clause subject, knowledge type, and clause, $F(1, 79) = 5.20$, $p < .05$, $\eta_p^2 = .06$. I hypothesized that participants in the redrafted clause condition would perform better on all of the comprehension subscales than participants in the original clause condition would. Follow-up t-tests revealed that participants' comprehension on the medical necessity declarative questions subscale, $t(1, 79) = .42$, $p = .67$, $d = .09$, the claims procedure declarative questions subscale, $t(1, 79) = .72$, $p = .48$, $d = .16$, and the claims procedure procedural questions subscale, $t(1, 79) = 1.59$, $p = .12$, $d = .36$, did not differ significantly by clause condition. However, the means were in the expected directions, except on the claims procedure procedural questions subscale. Consistent with hypotheses, there was a significant difference

between participants in the redrafted clause condition and participants in the original clause condition on medical necessity procedural questions, $t(1, 79) = 2.39$, $p < .05$, $d = .54$, with participants in the redrafted clause condition performing better on that subscale. Because I did not predict that comprehension would vary depending on question type and the subscale differences found in Study 2 may not generalize, these differences are discussed in relation to results from Study 3.

Health History and Insurance Status. I also expected that employees with more experience with the healthcare industry would demonstrate greater comprehension than employees with less familiarity with the healthcare industry. Participants' health history is presented in Table 10. Several t-tests were run to determine if several measures of health history were related to overall comprehension. Participants reporting poor or fair health were compared to participants reporting good or excellent health, participants with a chronic disease were compared to participants without a chronic disease, participants hospitalized in the last two years were compared to participants who were not hospitalized in the last two years, participants who had seen a doctor in the last two years were compared to participants who had not seen a doctor in the last two years, and participants who had seen a specialist were compared to participants who had not seen a specialist. The only effect that was significant was inconsistent with hypotheses. Participants who had seen a specialist in the last two years had lower overall comprehension ($M = .10$, $SD = .18$) than participants who had not seen a specialist ($M = .19$, $SD = .21$), $t(1, 75) = 2.14$, $p < .05$, $d = .49$. Therefore, the present study did not find any evidence for the hypothesis that more experience with the healthcare industry leads to better comprehension of healthcare documents.

Table 10. Participant Health History	
Status	
Poor	1.2%
Fair	21.0%
Good	53.1%
Excellent	24.7%
Chronic disease	23.5%
Hospital (in last year)	24.7%
Days hospitalized	4.94
Doctor (in last 2 years)	84.0%
Doctors seen	2.81
Specialist	54.5%

Participants' insurance status is presented in Table 11. T-tests were run to determine if two measures of insurance status had an influence on comprehension. Participants with insurance (M = .16, SD = .20) were compared to participants without insurance (M = .13, SD = .20), and participants with some claims experience (M = .15, SD = .21) were compared to participants without any claims experience (M = .15, SD = .18). There were no significant effects of insurance status or claims experience on overall comprehension, ts (1, 79) = .58, .14, ps = .57, .89, ds =.13, .03. Therefore, the present study did not find any evidence that more experience with the health insurance industry leads to better comprehension of health insurance documents.

Table 11. Participant Insurance Status	
No insurance	22.2%
Private insurer	33.3%
Public insurer	13.6%
Employer insurer	44.4%
Supplemental insurance	1.2%
Years insured	11.58
Claims experience	61.7%
Pre-authorization	43.2%
Pre-service claim	17.3%
Post-service claim	23.5%
Denied coverage	2.5%
Appealed denial	1.2%

Repeated measure ANOVAs were run to determine if insurance status and claims experience moderated the 3-way interaction between clause subject, knowledge type, and clause. Although the 3-way interaction between clause subject, knowledge type, and clause was not significant for the uninsured, $F(1, 16) = .32$, $p = .58$, $\eta_p^2 = .02$, the interaction was significant for the insured, $F(1, 61) = 6.60$, $p < .05$, $\eta_p^2 = .10$. The main effect for clause was not significant for the uninsured, $F(1, 16) = 2.29$, $p = .15$, $\eta_p^2 = .13$, but it was marginally significant for the insured, $F(1, 61) = 3.44$, $p = .07$, $\eta_p^2 = .05$. The main effect for clause subject was not significant for the uninsured, $F(1, 16) = .00$, $p =$

.96, η_p^2 = .00, but it was significant for the insured, $F(1, 61) = 7.46$, $p < .01$, η_p^2 = .11. The 2-way interaction between clause subject and knowledge type was not significant for the uninsured, $F(1, 16) = 3.27$, $p = .09$, η_p^2 = .17, but it was significant for the insured, $F(1, 61) = 77.80$, $p < .001$, η_p^2 = .56. In contrast, the 2-way interaction between clause subject and clause was significant for the uninsured, $F(1, 16) = 5.51$, $p < .05$, , η_p^2 = .26, but not for the insured, $F(1, 61) = 1.89$, $p = .17$, η_p^2 = .03.

Although the 3-way interaction between clause subject, knowledge type, and clause was not significant for those without claims experience, $F(1, 29) = .07$, $p = .79$, η_p^2 = .00, the interaction was significant for those with claims experience, $F(1, 48) = 8.74$, $p < .01$, η_p^2 = .15. The main effect for clause was not significant for those without claims experience, $F(1, 29) = .90$, $p = .35$, η_p^2 = .03, but it was marginally significant for those with claims experience, $F(1, 48) = 3.32$, $p = .08$, η_p^2 = .07. The main effect for clause subject was not significant for those without claims experience, $F(1, 29) = .54$, $p = .47$, η_p^2 = .02, but it was significant for those with claims experience, $F(1, 48) = 6.71$, $p < .05$, η_p^2 = .12. The presence of a 2-way interaction between clause subject and knowledge type and the lack of a 2-way interaction between clause subject and clause was consistent across claims experience. These results suggest that the positive effect redrafting had on comprehension of certain subscales only existed for participants with health insurance and/or claims experience. Perhaps, individuals need some experience with the health insurance industry to benefit from simplified healthcare documents.

Study 3

In Study 3, employees and undergraduates read the same clauses presented in Study 2. Participants either read plan documents without any a priori knowledge

(reading-to-learn condition) or knowing they had been denied coverage (reading-to-do condition). In addition to completing the comprehension test used in Study 2, participants were told the Health Plan had denied them care that they had requested and they took part in a simulated appeals process. Participants assessed the procedural fairness of the appeal process and their satisfaction with the plan. I expected comprehension to be better for the redrafted clauses, as compared to the original clauses, and for the reading-to-do task, as compared to the reading-to-learn task. I also expected comprehension, plan approval, and the strength of the claim to predict the decision to appeal. I hypothesized that better comprehension would be associated with an increased propensity to appeal a strong claim and a decreased propensity to appeal a weak claim. I also expected participants to appeal the plan administrator's decision more often when they perceived the decision-making process as procedurally unfair and when they were less satisfied with the plan.

Method

Participants. Employed adults (N = 800), who had volunteered to participate in web-based research through www.studyresponse.com, were recruited through an email which contained a link to the study website. Employees were entered into a lottery to receive gift certificates for their participation. Of the 800 employees recruited to participate in the study, 126 individuals (16%) completed the study.

Because an insufficient number of employee participants completed the study, undergraduate students were recruited from University of Nebraska-Lincoln psychology courses. Students (N = 126) received extra credit for their participation.

Materials. Participants read the same clauses used in Study 2.

In addition, participants were provided benefit denial letters (see Appendix E) from the hypothetical Health Plan's claims administrator. The letter was adapted from an actual benefit denial letter collected along with the litigated SPDs.

Procedure. Participants were randomly assigned to the 2 (clause: original v. redrafted) x 2 (task: reading-to-learn v. reading-to-do) x 2 (claim: weak v. strong) between-subjects factorial. Participants completed the study over the internet and provided informed consent.

In the reading-to-learn task condition, participants were instructed to read the sections of a Health Plan as if they were members of the Health Plan. They were informed that they would be questioned about the Health Plan and the Health Plan would be available for them to refer back. In the reading-to-do task condition, participants received additional instructions: "As you read about the Health Plan, **keep in mind** that the claims administrator for the Health Plan has denied you coverage for care your physician believed was medically necessary."

After reading the medical necessity and claims procedure clauses, participants answered demographic questions.

Participants completed the same manipulation checks as Study 2. In addition, participants were asked whether they were instructed that the claims administrator for the Health Plan had denied them coverage for care their physician believed was medically necessary *before they read the Health Plan*.

Then, participants completed the same comprehension test from Study 2.

After completing the comprehension test, participants were instructed to imagine that they were members of the Health Plan about which they just had read and that they

had been seeing their doctors about varicose veins in their legs. In the weak claim condition, participants were told that they, in agreement with their doctor, thought the varicose veins should be removed because they were visibly unattractive and occasionally painful. In the strong claim condition, participants were told that they, in agreement with their doctor, thought the varicose veins should be removed because they had made walking and exercise painful. Participants were informed that they had filed a pre-service claim for surgical removal of varicose veins and then read the Health Plan's response to their request (see Appendix E).

As a manipulation check, participants rated their agreement with the following statements on 5-point scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*): (1) in this situation, I would have had a strong claim for surgical removal of varicose veins and (2) in this situation, the Health Plan was right to deny my claim for surgical removal of varicose veins.

Participants were asked how they would respond to the denial. They answered the following questions on 5-point scales, ranging from 1 (*not at all likely*) to 5 (*extremely likely*): (1) in this situation, how likely would you be to appeal the claim administrator's decision through the Health Plan's appeal process and (2) in this situation, how likely would you be to seek legal counsel before you appeal the decision through the Health Plan's appeal process.

Then, participants rated their agreement with procedural fairness statements about the Health Plan on 5-point scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) (see Appendix F). The questions were drawn from studies that examined procedural fairness in the healthcare context (e.g., Hibbard & Jewett, 1997; Murphy-

Berman et al., 1999; Roberts & Markel, 2001; Skarlicki & Folger, 1997). The questions addressed several characteristics of procedural fairness: control, neutrality, trust, and social standing (Tyler, 1989). Participants also were asked questions regarding their satisfaction with the Health Plan (see Appendix F) based on previous studies (i.e., Edgman-Levitan & Cleary, 1996; Harris-Kojetin et al., 2001; Hibbard & Jewett, 1997). The procedural fairness and plan satisfaction items were combined to create an index of plan approval.

Then, participants received a second benefit denial letter (see Appendix E) that confirmed the Health Plan's first denial of coverage. Participants answered the following questions on 5-point scales, ranging from 1 (*not at all likely*) to 5 (*extremely likely*): (1) in this situation, how likely would you be to sue the Health Plan under Section 502(a) of ERISA and (2) in this situation, how likely would you be to seek legal counsel in order to decide whether you should appeal the Health Plan's decision through the legal system. At this point, participants answered the questions regarding procedural fairness and plan satisfaction again.

Finally, participants completed the S-TOFHLA and questions about their health history and insurance status from Study 2.

Results and Discussion

Participants ($N = 21$) who spent less than ten minutes answering study questions were excluded from data analyses, leaving 210 participants. *N*s across conditions ranged from 98 to 112. Participants dropped from data analyses were not more likely to be in the original clause condition than in the redrafted clause condition, $\chi^2(1, N = 231) = 1.00$, $p = .32$. Participants included in analyses spent an average of 2101.73 seconds (~35 minutes;

SD = 5817.19) answering questions. The demographic characteristics of the 210 participants included in subsequent analyses are presented in Table 12. There were few differences in comprehension across demographic groups. Women (*M* = .21, *SD* = .18) had better comprehension than men (*M* = .13, *SD* = .18), $t(1, 206) = 2.71$, $p < .01$, $d = .38$, which is inconsistent with the finding that greater knowledge of health insurance has been associated with being male (Lambert, 1980; McCormack et al., 2002). Consistent with results from Study 2, older participants had better comprehension, $r(201) = .19$, $p < .01$. Inconsisent with other studies, higher education, higher income, and being White were not associated with greater knowledge of health insurance information.

Because 100% of participants demonstrated adequate health literacy (*M* = 34.93, *SD* = 1.33, Range = 28-36) as measured by the S-TOFHLA, I was not able to use health literacy in subsequent analyses.

Table 12. Participant Demographic Information

	Employees (*N* = 93)	Students (*N* = 117)
Gender	28.3% men	26.5% men
Race	80.6% Caucasian	82.9% Caucasian
Age	*M* = 40.52 years	*M* = 21.72 years
Education	48.4% some college or more	100% some college
Household Income	50.5% less than $50,000	30.8% less than $50,000
Work for pay	93.5%	72.6%
Work > 30 hrs a week	76.3%	19%
States represented	33	Nebraska

Participant Type Differences. I compared the scores on the comprehension scale and subscales for each participant type to determine whether the two groups could be combined for analyses. Table 13 shows employees' and students' scores on the comprehension subscales.

Table 13. Employee and Student Scores on Comprehension Test Subscales

	Employees (*N* = 93)	Students (*N* = 117)
	M (*SD*)	*M* (*SD*)
Medical Necessity		
Declarative	.35 (.34)	.22 (.32)
Procedural	.03 (.35)	.02 (.31)
Claims Procedure		
Declarative	.17 (.29)	.09 (.29)
Procedural	.31 (.27)	.31 (.26)
Overall	.22 (.19)	.16 (.17)

Employees scored significantly higher than students on the medical necessity declarative question subscale, claims procedure declarative question subscale, and overall comprehension scale, *t*s(1, 208) = 2.88, 2.03, 2.20, *ps* <.05, *d*s = .40, .28, .31. Employees and students did not differ from each other on the medical necessity procedural question subscale and the claims procedure procedural question subscale, *t*s(1, 208) = .10, .23, *ps* = .92, .82, *d*s = .01, .03. Because employees and students did differ from each other on some of the comprehension measures, participant type was included as a separate factor in subsequent analyses.

Plan Differences. Again, I compared the scores on the appropriate comprehension subscales for each Health Plan to determine whether the clauses from Plan 1 and 2 could be combined for analyses. For the medical necessity clauses, scores

of participants who received the original version of Plan 1 (*M* = .29, *SD* = .35; *M* = .03, *SD* = .33) did not differ on the declarative and procedural question subscales from scores of participants who received the original version of Plan 2 (*M* = .30, *SD* = .33; *M* = .10, *SD* = .36), *t*s(1, 102) = .17, 1.02, *p*s = .87, .31. However, scores of participants who received the redrafted version of Plan 1 (*M* = .20, *SD* = .31; *M* = .06, *SD* = .29) did differ on the declarative and procedural question subscales from scores of participants who received the redrafted version of Plan 2 (*M* = .34, *SD* = .34; *M* = -.09, *SD* = .30), *t*s(1, 104) = 2.14, 2.59, *p*s < .05, *d*s = .42, .51. Participants who read the redrafted version of Plan 1, as compared to Plan 2, performed worse on the declarative question subscale but performed better on the procedural question subscale. Because the results of the Plans were mixed in Study 3 and there were no differences between the Plans in Study 2, the Plans were collapsed for analyses.

For the claims procedure clauses, scores of participants who received the original version of Plan 1 (*M* = .13, *SD* = .27; *M* = .31, *SD* = .26) did not differ on the declarative and procedural question subscales from scores of participants who received the original version of Plan 2 (*M* = .05, *SD* = .30; *M* = .27, *SD* = .23), *t*s(1, 102) = 1.50, .92, *p* = .14, .36. Scores of participants who received the redrafted version of Plan 1 (*M* = .19, *SD* = .29; *M* = .35, *SD* = .29) did not differ on the declarative and procedural question subscales from scores of participants who received the redrafted version of Plan 2 (*M* = .14, *SD* = .31; *M* = .31, *SD* = .28), *t*s(1, 104) = .94, .61, *p* = .35, .54. Because scores on the declarative and procedural questions did not differ depending on whether participants read the claims procedure clause from Plan 1 or Plan 2, the Plans were collapsed for analyses.

Manipulation Checks. Again, t-tests were used to examine perceptions of understandability to test whether participants detected a difference in the readability of the original and redrafted clauses. Participants were asked to rate how easy it was to understand the clauses and how well they understood the clauses. For the medical necessity clauses, participants in the redrafted clause condition (M = 3.39, SD = .97) rated the clause they read as significantly easier to understand than participants in the original clause condition (M = 3.10, SD = 1.05) did, $t(1, 208) = 2.09$, $p < .05$, $d = .29$. However, participants in the redrafted clause condition (M = 3.56, SD = .92) did not claim that they personally understood the clause they read any better than participants in the original clause condition (M = 3.51, SD = .99) did, $t(1, 206) = .36$, $p = .72$, $d = .05$.

For the claims procedure clauses, participants in the redrafted clause condition (M = 3.29, SD = 1.02) rated the clause they read as marginally easier to understand than participants in the original clause condition (M = 3.04, SD = 1.06) did, $t(1, 207) = 1.72$, $p = .09$, $d = .24$. However, participants in the redrafted clause condition (M = 3.42, SD = .93) did not claim that they personally understood the clause they read any better than participants in the original clause condition (M = 3.30, SD = 1.05) did, $t(1, 206) = .88$, $p = .38$, $d = .12$. Therefore, participants rated the redrafted versions of the clauses as easier to understand, but they did not feel that they personally understood the redrafted versions any more than they understood the original versions. These results suggest that although the redrafted clauses appeared more readable than the original clauses, participants did not feel like they understood them any better. However, these results were based on participants reading only one type of clause. When participants read both the original and redrafted versions of the clauses in the post-hoc study reported in Study 2,

participants rated the redrafted clauses as more readable than the original clauses. Thus, despite the mixed results of the manipulation check, the redrafting did appear to affect perceptions of the clauses' readability and comprehensibility.

As a manipulation check for the task condition, participants were asked whether they were instructed *before* they read the Health Plan that the claims administrator for the Health Plan had denied them coverage for care their physician believed was medically necessary. Seventy percent of participants in the *reading-to-do task* condition correctly reported that before they read plan documents they were instructed that the claims administrator had denied them coverage for care. Correspondingly, 81% of participants in the *reading-to-learn task* condition correctly reported that before they read plan documents they were not instructed that the claims administrator had denied them coverage for care. Because so many participants (N = 50) would be dropped based on the task manipulation check, analyses were performed both with (N = 210) and without (N = 160) participants who failed the manipulation check. These analyses yielded highly comparable findings, so the following sections present results for the entire sample.

As a manipulation check for claim condition, participants were asked to rate the strength of their claim for surgical removal of varicose veins and the rightness of the plan's denial of their claim after the first and second benefit denial letter. Because the reliability coefficients for the four questions was high (α = .86), the measures were combined into one claim strength index. Participants in the strong claim condition (M = 3.46, SD = .86) rated their claim as significantly stronger than participants in the weak claim condition (M = 2.34, SD = .83), $t(1, 207) = 9.57$, $p < .001$, d = 1.33. Therefore, the claim strength manipulation was successful.

Participant Type. I did not have any a priori hypotheses regarding employees' and students' comprehension of the clauses. Because employees scored better than students on some of the subscales, I included participant type in my analyses. A repeated measures ANOVA was performed with clause subject (i.e., medical necessity and claims procedure) and knowledge type (i.e., declarative and procedural) as within-subjects factors and clause (original v. redrafted), task (reading-to-learn v. reading-to-do), and participant type (employees v. students) as between-subjects factors. The ANOVA revealed a main effect for participant type, $F(1, 202) = 4.64$, $p < .05$, $\eta_p^2 = .02$.

Employees' and students' scores on the comprehension tests are shown in Table 13 above. There also was a significant 2-way interaction between knowledge type and participant type, $F(1, 202) = 7.40$, $p < .01$, $\eta_p^2 = .04$, such that employees demonstrated greater declarative knowledge than students, $t(1, 208) = 3.06$, $p < .01$, $d = .42$, but the two groups did not differ in procedural knowledge, $t(1, 208) = .22$, $p = .83$, $d = .03$. As discussed above, employees' and students' comprehension did not differ on the medical necessity procedural question subscale and the claims procedure procedural question subscale, but employees scored significantly higher than students on the medical necessity declarative question subscale, claims procedure declarative question subscale, and overall comprehension scale. Therefore, employees retained more declarative knowledge regarding the clauses than students did. One explanation for why employees performed better than students on some measures could have been that employees spent more time on the task. However, employees ($M = 825.24$ seconds, $SD = 1208.03$) did not spend more time on the comprehension test than students did ($M = 846.23$ seconds, $SD = 590.12$), $t(1, 208) = .17$, $p = .87$; indeed, employees spent slightly less time on the task

than students. A more likely reason that employees may have performed better than students is that employees had slightly more experience with the healthcare system and the insurance industry than students. This finding is discussed below in the section on health history and insurance status (see Tables 18 and 19).

Redrafting. Participants completed a comprehension test to demonstrate their understanding of the medical necessity and claims procedure clauses. Across employee and student participants, the mean overall comprehension accuracy score across all test items was .19 (*SD* = .18), which indicates that participants made slightly more correct responses than incorrect responses. This result is slightly higher than the mean overall comprehension accuracy score found in Study 2 (*M* = .15). Although .19 is not very far above the chance level of zero, an independent t-test showed that this difference was significant, $t(1, 209) = 14.99$, $p < .001$, $d = 2.07$. On average, 52.57% of participants' responses were hits, 33.66% were misses, and 13.77% were *do not know* answers. Therefore, participants demonstrated poor comprehension of their benefits and their rights and responsibilities regarding the Health Plan. These percentages are similar to those found in Study 2. Table 14 shows the comprehension rates broken out by participant type.

Table 14. Comprehension Rates as a Function of Participant Type

	Employees (N = 93)	Students (N = 117)
Overall	.22	.16
Hits	.54	.51
Misses	.33	.35
Do Not Know	.13	.14
T-test from zero	$t(1, 92) = 10.88$, $p < .001$, $d = 2.27$	$t(1, 116) = 10.50$, $p < .001$, $d = 1.95$

Again, I hypothesized that comprehension would be better for the redrafted clause as compared to the original clause. The repeated measures ANOVA revealed no main effect for clause, $F(1, 202) = .01$, $p = .91$, $\eta_p^2 = .00$. Both Study 2 and 3 found that redrafting did not improve comprehension of medical necessity and claims procedure clauses. Although the post-hoc study reported in Study 2 and the manipulation check on redrafting in Study 3 indicated that there was a difference between the readability of the clauses, the comprehension test demonstrated that redrafting was not effective in improving understanding. Participants detected a subjective improvement in readability that did not materialize into an objective difference in comprehension.

There are several possible reasons why redrafting had little effect on participants' understanding in both Study 2 and 3. Perhaps, the comprehension test was not sensitive enough to detect slight improvement in understanding. Another possible reason that redrafting may not have had more of an effect on participants in the present study is that

participants had such high health literacy as demonstrated by their average score of 34.10 in Study 2 and 34.93 in Study 3 out of a possible score of 36 on the S-TOFHLA. Due to their high levels of health literacy, participants may not have struggled to understand the original version of the clauses. However, the mean overall comprehension accuracy score of .15 in Study 2 and .19 in Study 3 suggests comprehension was relatively poor regardless of which version of the clauses participants read. Perhaps, medical necessity and claims procedure clauses are too complex to understand even when they are simplified. On the other hand, participants may not have had enough incentive to expend the cognitive effort required to understand such complex material. However, participants who spent more time on the task did not demonstrate greater comprehension in Study 2, $r(81) = -.04$, $p = .74$, or Study 3, $r(210) = .07$, $p = .32$.

One of the most plausible reasons for the lack of a redrafting effect is that the redrafted document was not different enough from the original document. Although participants who viewed the clauses side by side in a post-hoc study rated the redrafted clauses as more readable than the original clauses, participants in Study 2 and 3 did not report that strong a difference (i.e., only one of the two manipulation check measures was significant in Study 3) and their comprehension scores did not vary by clause condition. Because it is difficult to reduce word count without changing meaning, I decided to keep word count similar for the original and redrafted clauses. Perhaps redrafting would have had more of an effect if the redrafted clause had been shorter than the original clause. Other researchers have found that shortening text did improve comprehension of medical consent forms (Mann, 1984; Wogalter et al., 1999).

There was a significant main effect for clause subject, $F(1, 202) = 8.40$, $p < .01$, $\eta_p^2 = .04$, such that participants had better knowledge for the claims procedure clauses (M =.22, SD = .22) than for the medical necessity clauses (M = .15, SD = .25). Consistent with results from Study 2, this finding suggests that the claims procedure questions may have been easier than the medical necessity questions. There also was a significant main effect for knowledge, $F(1, 202) = 4.86$, $p < .05$, $\eta_p^2 = .02$, such that participants had better declarative knowledge (M =.19, SD = .25) than procedural knowledge (M = .18, SD = .22). Consistent with results from Study 2, there was a significant 2-way interaction between clause subject and knowledge type, $F(1, 202) = 163.40$, $p < .001$, $\eta_p^2 = .45$; the means for the different subscales are presented in Table 15.

Table 15. Average Scores on Comprehension Test Subscales

	M	*SD*	Range
Medical Necessity			
Declarative	.28	.34	-.71-1.00
Procedural	.02	.33	-.71-.86
Claims Procedure			
Declarative	.13	.30	-.78-1.00
Procedural	.31	.26	-.44-1.00

Again, participants were more accurate when medical necessity questions were directed at declarative knowledge rather than procedural knowledge, $t(1, 209) = 8.83$, $p < .001$, d = 1.22, and when claims procedure questions were directed at procedural knowledge

rather than declarative knowledge $t(1, 209) = 7.70$, $p < .001$, $d = 1.07$. It appears that medical necessity clauses lend themselves to declarative knowledge and claims procedure clauses lend themselves to procedural knowledge.

As in Study 2, there was a significant 2-way interaction between clause subject and clause, $F(1, 202) = 6.57$, $p < .05$, $\eta_p^2 = .03$. However, whereas redrafting improved comprehension for the medical necessity clauses but not for the claims procedure clauses in Study 2, redrafting improved comprehension for the claims procedure clauses, $t(1, 208) = 1.96$, $p = .05$, $d = .27$, but not for the medical necessity clauses in Study 3, $t(1, 208) = 1.46$, $p = .15$, $d = .20$. The average scores for the clause subjects and the subscales as a function of clause are shown in Table 16.

Table 16. Scores on Comprehension Test Subscales as a Function of Clause

	Original (N = 104)	Redrafted (N = 106)
	M (SD)	M (SD)
Medical Necessity	.18 (.26)	.13 (.24)
Declarative	.29 (.34)	.27 (.33)
Procedural	.07 (.34)	-.02 (.30)
Claims Procedure	.19 (.21)	.25 (.22)
Declarative	.09 (.29)	.16 (.30)
Procedural	.29 (.24)	.33 (.28)

In contrast to Study 2, there was not a 3-way interaction between clause subject, knowledge type, and clause, $F(1, 202) = .09$, $p = .77$, $\eta_p^2 = .00$. I hypothesized that

participants in the redrafted clause condition would perform better on all of the comprehension subscales than participants in the original clause condition would. This prediction received mixed results in Study 2 and little support in Study 3.

It is difficult to explain the differences in question type as a function of clause for two reasons: (1) I did not predict that comprehension would vary depending on question type, and (2) the subscale differences found in Study 3 are not consistent with the subscale differences found in Study 2. In Study 2, means were in the expected direction for all the subscales except for the claims procedure procedural questions subscale. In Study 3, means on the claims procedure subscales were in the expected directions, but means on the medical necessity subscales were not. The only result that was consistent with hypotheses was that participants' performance on the medical necessity procedural questions subscale in Study 2 was significantly better in the redrafted clause condition than the original clause condition. In general, redrafting medical necessity and claims procedure clauses did not improve participants' comprehension in either study.

Task. I also expected that comprehension would be better for the reading-to-do task as compared to the reading-to-learn task because the former task promotes deeper integration of material than the latter. The average scores for the comprehension subscales as a function of task are shown in Table 17.

Table 17. Scores on Comprehension Test Subscales as a Function of Task

	Reading-to-learn (N = 98)	Reading-to-do (N = 112)
	M (SD)	M (SD)
Medical Necessity		
Declarative	.26 (.33)	.30 (.34)
Procedural	.05 (.32)	.00 (.33)
Claims Procedure		
Declarative	.09 (.31)	.15 (.28)
Procedural	.31 (.27)	.31 (.26)

The same repeated measures ANOVA as above revealed that task produced no main effect, $F(1, 202) = .32$, $p = .57$, $\eta_p^2 = .00$, or any interactions, $F(1, 202) < 3.47$, $p > .06$, $\eta_p^2 < .02$. Therefore, the present study found no support for the hypotheses that the reading-to-do task would improve comprehension or that redrafting would interact with the reading-to-do task to improve comprehension. Perhaps Duffy and Kabance's (1982) broad-based research on readability and comprehension does not generalize to comprehension of healthcare documents. Healthcare documents may be too complicated for consumers to understand even when they have a priori knowledge of what information will be relevant to them. Furthermore, consumers may not realize what health plan information is important in the face of an impending benefit denial because they are unfamiliar with the appeals process. Alternatively, the manipulation of task condition in the present study may have been too weak. Before they read the Health

Plan, participants either received no instructions or received instructions that their Health Plan had determined that care they had requested was not medically necessary and that they would be questioned about the Health Plan. This instruction may not have been sufficient to motivate participants to engage in deeper integration of the materials. Participants in the reading-to-do task condition (M = 1833.70 seconds, SD = 2258.80) did not spend more time completing the study than participants in the reading-to-learn task did (M = 2408.05 seconds, SD = 8179.00), $t(1, 208) = .71$, $p = .48$, $d = .10$; indeed, participants in the reading-to-do condition spent about 10 minutes less time on the task than participants in the reading-to-learn task.

Health History and Insurance Status. I also expected that participants with more experience with the healthcare industry would demonstrate greater comprehension than participants with less familiarity with the healthcare industry. Participants' health history is presented in Table 18.

Table 18. Participant Health History

	Employees (N = 93)	Students (N = 117)	Overall (N = 210)
Status			
Poor	3.2%	0%	1.4%
Fair	16.1%	6.0%	10.5%
Good	61.3%	46.6%	53.1%
Excellent	19.4%	47.4%	34.9%
Chronic disease	30.4%	12.2%	20.3%
Hospital (in last year)	16.1%	16.2%	16.2%
Days hospitalized	5.08	2.75	3.79
Doctor (in last 2 years)	85.9%	91.5%	89.0%
Doctors seen	3.21	2.83	2.99
Specialist	53.3%	52.6%	52.9%

More employees reported being in poor or fair health than students did and more students reported being in good or excellent health than employees did, $\chi^2(1, N = 209) = 8.70$, $p < .01$. In addition, employees were more likely to have a chronic illness than students were, $\chi^2(1, N = 207) = 10.54$, $p < .01$. Employees and students reported similar rates of visiting a hospital in the last year ($\chi^2(1, N = 210) = .00$, $p = .98$), visiting a doctor in the last two years ($\chi^2(1, N = 209) = 1.64$, $p = .20$), and visiting a specialist ($\chi^2(1, N = 204) = .01$, $p = .92$). Similarly, employees and students were hospitalized for a similar amount

of days ($t(1, 27) = 1.06$, $p = .31$) and visited a similar number of doctors ($t(1, 185) = 1.18$, $p = .24$). Overall, employees appeared to have slightly more experience with the healthcare industry than students, which might explain why employees performed better than students on the medical necessity declarative question subscale, claims procedure declarative question subscale, and overall comprehension scale.

Several t-tests were run to determine if several measures of health history were related to overall comprehension. Participants reporting poor or fair health were compared to participants reporting good or excellent health, participants with a chronic disease were compared to participants without a chronic disease, participants hospitalized in the last two years were compared to participants who were not hospitalized in the last two years, participants who had seen a doctor in the last two years were compared to participants who had not seen a doctor in the last two years, and participants who had seen a specialist were compared to participants who had not seen a specialist. The only effect that was significant was consistent with hypotheses: participants who had seen a doctor in the last two years had better overall comprehension ($M = .20$, $SD = .18$) than participants who had not seen a doctor ($M = .12$, $SD = .20$), $t(1, 207) = 2.03$, $p < .05$, $d = .28$. Therefore, the present study found very little evidence for the hypothesis that more experience with the healthcare industry leads to better comprehension of healthcare documents.

Participants' insurance status is presented in Table 19.

Table 19. Participant Insurance Status

	Employees (N = 93)	Students (N = 117)	Overall (N = 210)
No insurance	16.1%	4.3%	9.5%
Private insurer	40.9%	29.9%	34.8%
Public insurer	20.4%	7.7%	13.3%
Employer insurer	47.3%	68.4%	59.0%
Supplemental insurance	5.4%	4.3%	4.8%
Years insured	14.12	15.15	14.7
Claims experience	61.3%	53.0%	56.7%
Pre-authorization	40.9%	33.3%	36.7%
Pre-service claim	22.6%	25.6%	24.3%
Post-service claim	28.0%	23.9%	25.7%
Denied coverage	10.8%	6.8%	8.6%
Appealed denial	3.2%	0.9%	1.9%

Employees reported being without insurance more than students, $\chi^2(1, N = 210) = 8.45$, $p < .01$. Employees were covered by public insurers more than students, $\chi^2(1, N = 210) = 7.28$, $p < .01$, but students were covered by employer insurers more than employees, $\chi^2(1, N = 210) = 9.51$, $p < .01$. A similar percentage of employees and students were covered by private insurers ($\chi^2(1, N = 210) = 2.74$, $p = .10$) and had supplemental insurance ($\chi^2(1, N = 210) = .14$, $p = .71$). Employees and students had insurance coverage for a similar

amount of years, $t(1, 208) = .66$, $p = .51$. Employees and students had a similar amount of claims experience: pre-authorization ($\chi^2(1, N = 210) = 1.26$, $p = .26$), pre-service claim ($\chi^2(1, N = 210) = .26$, $p = .61$), post-service claim ($\chi^2(1, N = 210) = .44$, $p = .51$), denied coverage ($\chi^2(1, N = 210) = 1.01$, $p = .31$), and appealed denial ($\chi^2(1, N = 210) = 1.56$, $p = .21$). Although employees and students may have had similar insurance coverage, if most students had coverage through their parents, employees may have had more actual experience with the insurance industry. This experience might explain why employees performed better than students on the medical necessity declarative question subscale, claims procedure declarative question subscale, and overall comprehension scale.

T-tests were run to determine if two measures of insurance status had an influence on comprehension: participants with insurance ($M = .19$, $SD = .19$) were compared to participants without insurance ($M = .14$, $SD = .15$), and participants with some claims experience ($M = .20$, $SD = .20$) were compared to participants without any claims experience ($M = .18$, $SD = .16$). There were no significant effects of insurance status or claims experience on overall comprehension, ts (1, 208) = 1.37, .74, ps = .17, .46, ds = .19, .10. Therefore, the present study did not find any evidence that more experience with the health insurance industry leads to better comprehension of health insurance documents.

Repeated measure ANOVAs were run to determine if insurance status and claims experience moderated the 2-way interaction between clause subject and clause. Although the 2-way interaction between clause subject and clause was not significant for the uninsured, $F(1, 13) = .85$, $p = .38$, $\eta_p^2 = .06$, the interaction was significant for the insured, $F(1, 182) = 7.12$, $p < .01$, $\eta_p^2 = .04$. The main effect for clause subject was not

significant for the uninsured, $F(1, 13) = .53$, $p = .48$, $\eta_p^2 = .04$, but it was significant for the insured, $F(1, 182) = 10.19$, $p < .01$, $\eta_p^2 = .05$. The main effect for knowledge type was not significant for the uninsured, $F(1, 13) = .32$, $p = .58$, $\eta_p^2 = .02$, but it was significant for the insured, $F(1, 182) = 4.96$, $p < .05$, $\eta_p^2 = .03$. The 2-way interaction between knowledge type and participant type was not significant for the uninsured, $F(1, 13) = 2.72$, $p = .12$, $\eta_p^2 = .17$, but it was significant for the insured, $F(1, 182) = 6.24$, $p < .05$, $\eta_p^2 = .03$. The 2-way interaction between clause subject and knowledge type was not significant for the uninsured, $F(1, 13) = 3.75$, $p = .08$, $\eta_p^2 = .22$, but it was significant for the insured, $F(1, 182) = 161.34$, $p < .001$, $\eta_p^2 = .47$. The lack of a main effect for clause and the presence of a main effect for participant type was consistent across insurance status.

Although the 2-way interaction between clause subject and clause was not significant for those without claims experience, $F(1, 83) = .90$, $p = .35$, $\eta_p^2 = .01$, the interaction was significant for those with claims experience, $F(1, 111) = 7.32$, $p < .01$, $\eta_p^2 = .06$. The main effect for clause subject was not significant for those without claims experience, $F(1, 83) = 1.22$, $p = .27$, $\eta_p^2 = .02$, but it was significant for those with claims experience, $F(1, 111) = 9.62$, $p < .01$, $\eta_p^2 = .08$. The main effect for knowledge type was not significant for those without claims experience, $F(1, 83) = .49$, $p = .49$, $\eta_p^2 = .01$, but it was significant for those with claims experience, $F(1, 111) = 4.83$, $p < .05$, $\eta_p^2 = .04$. The 2-way interaction between knowledge type and participant type was not significant for those without claims experience, $F(1, 83) = 2.45$, $p = .12$, $\eta_p^2 = .03$, but it was significant for those with claims experience, $F(1, 111) = 5.18$, $p < .05$, $\eta_p^2 = .05$. The

lack of a main effect for clause and participant type and the presence of an interaction between clause subject and knowledge type was consistent across claims experience. Similar to results in Study 2, these findings suggest that the positive effect redrafting had on comprehension of the claims procedure subscales only existed for participants with health insurance and/or claims experience. Perhaps, when consumers have some experience with the health insurance industry, their attention is drawn to certain clauses, such as claims procedure clauses, but not to all health plan information. Once attention is focused on a clause, redrafting of that clause may improve comprehension slightly.

Appeal Decisions, Procedural Fairness, and Plan Satisfaction. After the first benefit denial letter, participants rated how likely they would be to appeal the claim administrator's decision through the Health Plan's appeal process. After the second benefit denial letter, participants rated how likely they would be to sue the Health Plan under Section 502(a) of ERISA. Because these two measures were highly correlated, $r(206) = .66$, $p < .001$, the measures were combined into a single "appeal" measure, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

I expected more appeals in the strong claim condition and fewer appeals in the weak claim condition when participants read the redrafted clause, as opposed to the original clause, and completed the reading-to-do task, as opposed to the reading-to-learn task. A 4-way ANOVA was performed with clause, task, claim, and participant type as between-subjects factors and denial as the dependent variable. There was a main effect for claim, $F(1, 193) = 74.11$, $p < .001$, $\eta_p^2 = .28$, such that participants in the strong claim condition ($M = 3.82$, $SD = 1.02$) were more likely to appeal the denial than participants in the weak claim condition ($M = 2.56$, $SD = 1.04$). However, there were no other

significant main effects or interactions. Therefore, the hypothesis that readability and reading task would interact with claim strength to predict appeals was not supported. Perhaps, the claim manipulation was so strong that it simply overpowered the relatively weaker clause and task manipulations.

Similarly, I hypothesized that better comprehension would be associated with an increased propensity to appeal a strong claim and a decreased propensity to appeal a weak claim. The correlation between participants' overall scores on the comprehension test and their likelihood of appealing their denied claim depended on the strength of their claim. There was no correlation between comprehension and propensity to appeal for participants in the strong claim condition, $r(100) = .09$, $p = .39$. However, in the weak claim condition, the more participants understood the medical necessity and claims procedure clauses, the less likely they were to appeal a denied benefit, $r(109) = -.21$, $p < .05$. Therefore, the hypothesis that better comprehension would lead to more appropriate appeal decisions was partially supported.

After the first benefit denial letter, participants rated how likely they would be to seek legal counsel before appealing the decision through the Health Plan's appeal process. After the second benefit denial letter, participants rated how likely they would be to seek legal counsel in order to decide whether they should appeal the Health Plan's decision through the legal system. Because these two measures were highly correlated, $r(208) = .48$, $p < .001$, the measures were combined. A 4-way ANOVA was performed with clause, task, claim, and participant type as between-subjects factors and legal assistance as the dependent variable. There was a main effect for claim, $F(1, 193) = 36.67$, $p < .001$, $\eta_p^2 = .16$, such that participants in the strong claim condition ($M = 3.36$,

SD = .98) were more likely to seek legal assistance than participants in the weak claim condition (*M* = 2.53, *SD* = 1.07). It makes sense that participants who thought they had a more serious claim would seek out legal advice. There was a marginally significant interaction between clause and claim, $F(1, 193) = 3.49$, $p = .06$, $\eta_p^2 = .02$, and a significant 3-way interaction between clause, task, and claim, $F(1, 193) = 4.73$, $p < .05$, $\eta_p^2 = .02$. Although the 2-way interaction between clause and claim was not significant when participants completed the reading-to-learn task ($F(1, 89) = .04$, $p = .84$, $\eta_p^2 = .00$; Figure 1), the interaction was significant when participants completed the reading-to-do task ($F(1, 104) = 9.17$, $p < .01$, $\eta_p^2 = .08$; Figure 2). Participants in the strong claim condition were more likely to seek legal assistance when they read the original clause (*M* = 3.83, *SD* = .79) than when they read the redrafted clause (*M* = 3.02, *SD* = 1.09).

Figure 1. Interaction between Clause and Claim for Reading-To-Learn Task

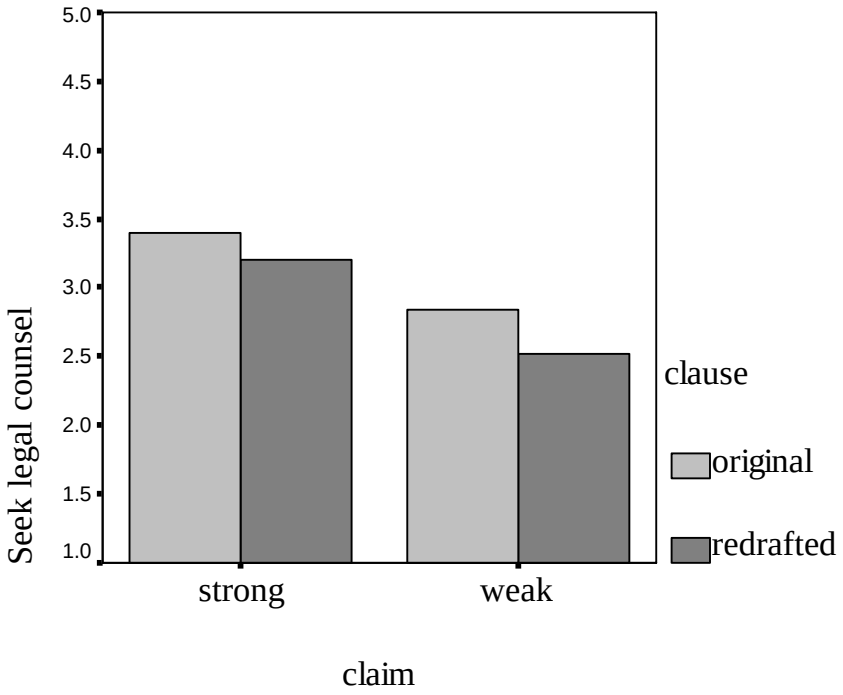
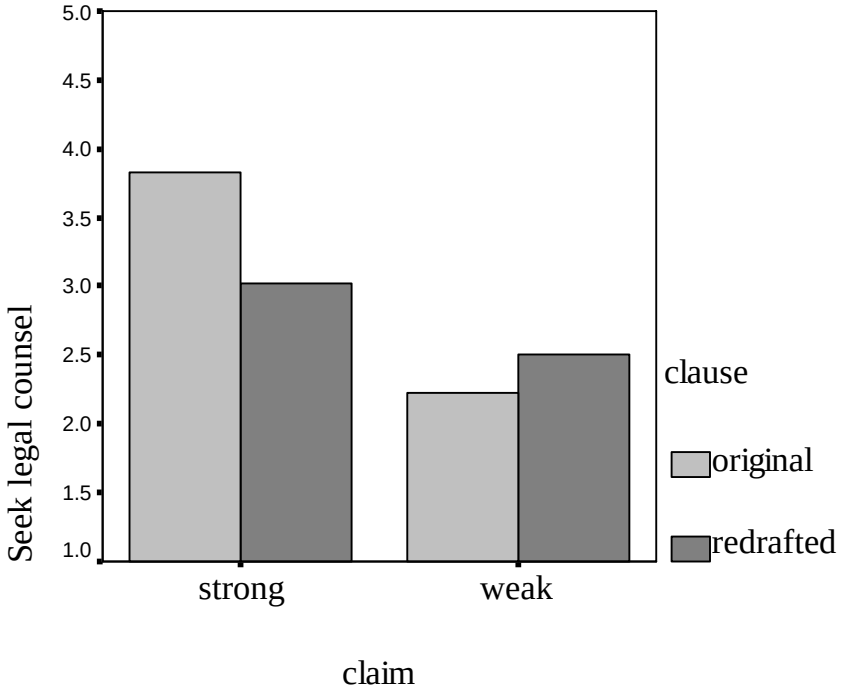


Figure 2. Interaction between Clause and Claim for Reading-To-Do Task



In the weak claim condition, participants' likelihood of seeking legal counsel did not vary by clause condition (original: $M = 2.22$, $SD = .72$; redrafted: $M = 2.50$, $SD = 1.16$). Perhaps, participants in the strong claim condition felt that they had a viable claim and were more likely to realize they needed a lawyer's expertise to understand their claim in the original clause condition, as compared to the redrafted clause condition. Participants in the weak claim condition probably did not think they needed to seek legal counsel, regardless of their ability to understand the clauses. No other interactions for seeking legal counsel were significant.

I also expected participants to appeal the plan administrator's decision more often when they perceived the decision-making process as procedurally unfair and when they were less satisfied with the plan. After the first and second benefit denial letters, participants rated their agreement with procedural fairness statements concerning control ($\alpha = .82$), neutrality ($\alpha = .80$), trust ($\alpha = .83$), and social standing ($\alpha = .92$) and with plan satisfaction statements ($\alpha = .74$). Because the reliability coefficient for the procedural fairness statements and the plan satisfaction statements made after the first and second benefit denial letters was high ($\alpha = .95$), the measures were combined into one plan approval index. The ratings for each of the questions and the combined plan approval index are presented in Table 20. As reported here, higher scores indicate that participants had a more positive perception of the Health Plan.

Table 20. Average Procedural Fairness and Plan Satisfaction Ratings

	First Denial Letter	Second Denial Letter
	M (*SD*)	*M* (*SD*)
Control	3.04 (.78)	3.00 (.86)
Neutrality	2.98 (.70)	2.94 (.81)
Trust	3.11 (.84)	3.01 (.89)
Social Standing	2.80 (.80)	2.69 (.88)
Plan Satisfaction	3.10 (.53)	3.06 (.67)
Plan Approval Index	3.01 (.62)	3.00 (.71)

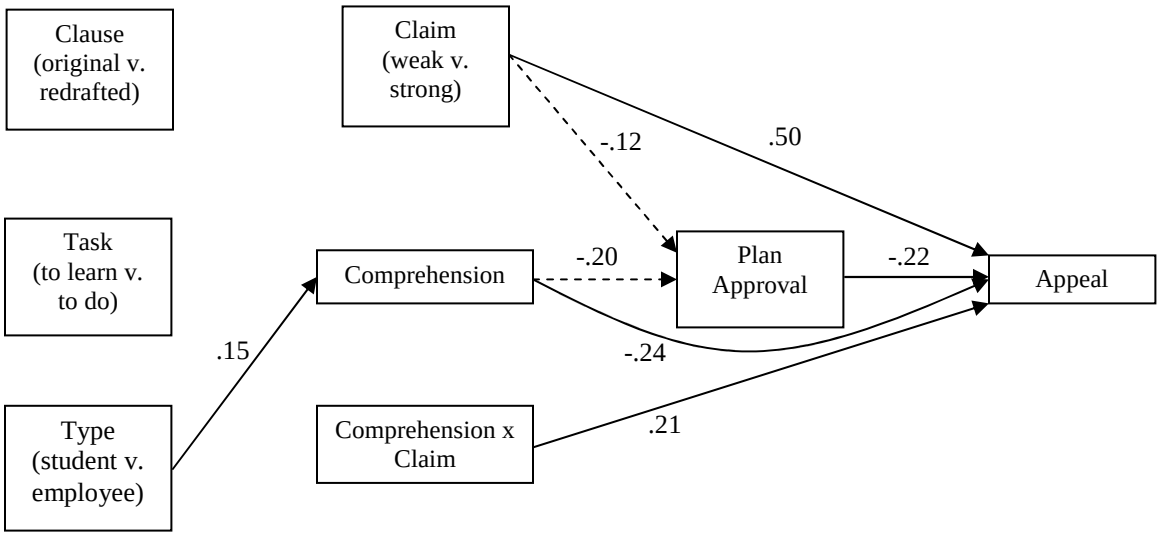
Because agreement with the statements was measured on a 5-point scale, the means indicate that, on average, participants felt neutral about the Health Plan. As predicted, the more participants felt the Health Plan was procedurally fair and the more participants were satisfied with the Health Plan, the less likely they were to appeal the denied claim, $r(209) = -.27$, $p < .001$. This result suggests that plan administrators can reduce the number of appeals filed against them by improving plan characteristics indicative of procedural fairness, such as control, neutrality, trust, and social standing.

Several t-tests were run to determine whether health history and insurance status affected plan approval or the propensity to appeal. For health history, participants reporting poor or fair health were compared to participants reporting good or excellent health, participants with a chronic disease were compared to participants without a chronic disease, participants hospitalized in the last two years were compared to

participants who were not hospitalized in the last two years, participants who had seen a doctor in the last two years were compared to participants who had not seen a doctor in the last two years, and participants who had seen a specialist were compared to participants who had not seen a specialist. There were no significant effects of health history on plan approval or the propensity to appeal. T-tests were run to determine if two measures of insurance status had an influence on plan approval or the propensity to appeal. Participants with insurance were compared to participants without insurance, and participants with some claims experience were compared to participants without any claims experience. There were no significant effects of insurance status or claims experience on plan approval or the propensity to appeal.

Predictors of Decision to Appeal Denied Benefits. I expected claim strength, comprehension, and plan approval to predict the decision to appeal. A path analysis was created to determine whether (1) the drafting of the clause, the type of task, and the type of participant predicted comprehension, (2) the strength of the claim, comprehension, and the interaction between comprehension and claim strength influenced plan approval, and (3) plan approval predicted the decision to appeal. Analyses were performed with procedural fairness and plan satisfaction as separate factors and with procedural fairness and plan satisfaction combined as one plan approval factor. These analyses yielded highly comparable findings, so the following section presents results using the plan approval factor. The results are presented in Figure 3, in which solid arrows indicate significant relationships and dashed arrows indicate marginally significant relationships.

Figure 3. Path Model for Decision to Appeal Denied Benefits



First, I tested whether clause, task, and participant type predicted comprehension. Employees (ß = .15, $p < .05$) had greater comprehension than students, but none of the other independent variables predicted comprehension, $R^2 = .03$, $F(3, 206) = 1.84$, $p = .14$. This finding is consistent with the results of the repeated measures ANOVA performed above. I next used clause, task, participant type, claim strength, comprehension, and the interaction between comprehension and claim strength to predict plan approval. When all variables were included in the equation, participants reported greater plan approval when they had a weak claim (ß = -.12, $p = .08$) and less comprehension (ß = -.20, $p = .05$), $R^2 = .05$, $F(3, 206) = 3.61$, $p < .05$. Participants with a weak claim were probably less disappointed that the Health Plan denied their claim because the denial seemed more reasonable. Perhaps, the less participants understood the Health Plan, the more satisfied they were with it because they did not realize the restrictions the Health Plan placed on its coverage and appeal process.

Finally, I tested whether the decision to appeal denied benefits was predicted by clause, task, participant type, claim strength, comprehension, the interaction between comprehension and claim strength, and plan approval. As predicted, participants were more likely to appeal a denied benefit when they had a strong claim (ß = .50, $p < .001$). They were less likely to appeal a claim the more they approved of the Health Plan (ß = -.22, $p < .001$). It appears that participants were less likely to challenge denied benefits when they were satisfied with the Health Plan's appeal process. In addition, participants were less likely to appeal a claim the more they comprehended the Health Plan (ß = -.24, $p < .01$), especially when they had a weak claim (ß = .21, $p < .05$), $R^2 = .34$, $F(4, 204) = 26.04$, $p < .001$. Thus, improved comprehension reduced the propensity to appeal denied claims. This effect was more pronounced in the weak claim condition where participants realized the futility of pursuing a weak claim. Therefore, the hypothesis that better comprehension would lead to more appropriate appeal decisions was partially supported.

General Discussion

The present study attempted to systematically evaluate the readability and comprehensibility of the language used in SPDs for healthcare plans in an effort to determine if SPDs are understandable to the average plan participant. ERISA requires that plan administrators provide consumers with understandable documents regarding their healthcare plans. ERISA § 102(a) requires that SPDs "shall be written in a manner calculated to be understood by the average plan participant, and shall be sufficiently accurate and comprehensive to reasonably apprise such participants and beneficiaries of their rights and obligations under the plan" (29 U.S.C. § 1022(a)). ERISA's disclosure requirement recognizes that plan participants cannot effectively protect their rights to

plan benefits unless they are well-informed. This objective is frustrated if SPDs are written above the reading ability of the average plan participant.

Comprehension

Readability. The present study examined understanding indirectly through readability tests and directly through multiple-choice comprehension tests. The present study focused on two portions of the SPD that have proved particularly litigious—medical necessity provisions and claims procedures for appealing denied coverage. First of all, the low inter-rater agreement between experts who pulled out medical necessity and claims procedure clauses from SPDs for Study 1 demonstrates the difficulty even trained ERISA experts have identifying the language of these clauses in SPDs (Medill et al., 2006).

More importantly, Study 1 found that both medical necessity clauses and claims procedure clauses were written at reading levels beyond those one might expect the average plan participant to possess. According to the Flesch Reading Ease test, Flesch Grade Level test, and Fog Index, medical necessity clauses were written at the college reading level and above the recommended level for business material (Thomas et al, 1975). Claims procedure clauses received better scores on these measures but still required a college reading level according to the Flesch Reading Ease test and were above the recommended level for technical material according to the Fog Index (Thomas et al, 1975). Therefore, similar to medical consent forms, some SPDs clauses appear to require high levels of reading ability, which many consumers do not possess.

Comprehension. Few studies have explored comprehension of legal rights from written documents, and the present study is the first to examine comprehension of ERISA

rights from SPD clauses. Studies 2 and 3 confirmed that actual consumers struggled to understand these clauses. In both studies, participants' overall comprehension accuracy scores (.15 in Study 2 and .19 in Study 3) indicated that respondents made slightly more correct responses than incorrect responses. In both studies, participants' performance was significantly better than chance, but they provided incorrect answers to multiple-choice questions nearly half of the time. These findings are consistent with research that suggests a high percentage of Americans do not understand how their healthcare plans operate and, consequently, are not equipped to deal with a complicated appeals process that often favors plan administrators over plan participants (Edgman-Levitan & Cleary, 1996; Hibbard & Jewett, 1997; Hibbard et al., 1998; Isaacs, 1996; Lubalin & Harris-Kojetin, 1999; McCormack et al., 2002). Even though the vast majority of participants in Studies 2 and 3 had adequate functional health literacy, most participants did not demonstrate good comprehension of their benefits or their rights and responsibilities regarding the health plan.

These findings indicate that some SPDs may not comply with ERISA § 102(a)'s requirement that SPDs "shall be written in a manner calculated to be understood by the average plan participant" (29 U.S.C. § 1022(a)). Because results from the present study are based on a small sample of SPDs and a small number of participants, these results should be interpreted with caution. Nevertheless, the National Adult Literacy Survey suggests that 20 to 23% of adults are functionally illiterate and another 26% have marginal literary skills (Kirsh et al., 1993). As a result, the majority of surveyed institutional review boards require that medical consent forms be written at 5th- to 10th-grade reading levels (Paasche-Orlow et al., 2003). In contrast, many SPDs appear to be

written at the college reading level, and, more importantly, many consumers do not understand their content. Because many SPDs require such a high level of reading ability, they defeat the federal law's purpose of providing participants and beneficiaries with full disclosure of important information concerning their health plans. In this age of consumer-driven healthcare, SPDs are meant to be the primary source of information for participants in employer-sponsored healthcare plans. ERISA litigation is premised on the assumption that plan participants are able to use the information in their SPDs to protect their rights regarding their health plans. Findings from the present study suggest that the written language of many SPDs may be inadequate to satisfy the legal standard for participant understanding established under ERISA. Indeed, the Advisory Council on Employee Welfare and Pension Plans has advised the Secretary of Labor to provide additional regulatory guidance to help plan administrators prepare understandable and user-friendly SPDs and to enhance regulatory mechanisms to enforce the requirement that SPDs be understandable (U.S. Department of Labor, 2005).

Improving Comprehension. In an effort to improve the readability of medical necessity and claims procedure clauses, I redrafted them by breaking up complex sentences into simpler sentences, making long words into shorter words, changing the tone from third to second person, and reducing the technical nature of the documents by eliminating jargon (Wogalter et al., 1999). In both Studies 2 and 3, these efforts failed to improve consumers' comprehension of their health plans. Although participants reported a subjective difference in the readability of the original and redrafted versions of the clauses, an objective difference was not found on the comprehension tests. There are several reasons why redrafting might not have improved comprehension in the present

study. On the one hand, the highly literate sample may have understood all of the information in the original version that was "clarified" in the redrafted version. More likely, the material was too complex to understand, even when redrafted, creating a floor effect in comprehension scores. Given the length of the study in general and the difficulty of the comprehension test in particular, fatigue may have been responsible for poor comprehension of the medical necessity and claims procedure clauses. In addition, participants may not have invested enough cognitive energy into trying to understand either version of the clauses. Participants may not have had enough motivation to read the clauses closely due to the simulated nature of the experiment. The possibility that the redrafted clauses may not have been different enough from the original clauses is discussed further in the section below on limitations of the present study.

Even though redrafting did not improve comprehension in the present study, the low comprehension rates found in Study 2 and 3 show that there is plenty of room to improve the understandability of SPDs. Other studies have demonstrated that it is possible to improve comprehension by redrafting legal documents (Mann, 1984; Masson & Waldron, 1994; Wogalter et al, 1999; Young et al., 1990). Plan administrators should strive to make SPDs as understandable as possible because the law requires that SPDs be understandable to the average plan participant. ERISA and contract law in general is premised on the assumption that both parties understand the terms of their agreement. Theoretically, both parties benefit when they each appreciate their responsibilities under the contract and realize the limitations of the scope of the contract. One policy consideration underlying ERISA's disclosure requirement is that plan administrators should be held accountable for their compliance with ERISA and the terms of their plans.

This purpose cannot be realized if plan participants do not understand their benefits or their rights under their health plans.

The Appeals Process

The purpose of making SPDs more understandable is not simply to decrease the number of appeals brought, though that would certainly be one benefit, but rather to increase the number of "appropriate" decisions to appeal. Consumers should accept plan administrators' decisions when they have weak claims and appeal denials when they have strong claims. Thus, in addition to being in compliance with ERISA's disclosure requirement, plan administrators may find that more understandable materials result in more appropriate appeal decisions. The present study is the first to have participants engage in a simulated health plan appeals process. I wanted to determine if claim strength, comprehension, and plan approval would influence the propensity to appeal denied benefits. Appropriately, participants were more likely to appeal a strong claim than a weak claim and were more likely to seek legal counsel when they had a strong, as opposed to weak, claim. Participants also reported greater plan approval when they had a weak claim, probably because it seemed more reasonable that the health plan would deny their claim. Interestingly, in the reading-to-do task condition, participants with a strong claim were more likely to seek legal advice when they read the original version of the clauses. One explanation for this finding is that, in the face of strong claims and poorly drafted documents, consumers are more likely to feel a lawyer's services are worth pursuing.

A big concern in ERISA litigation is that plan participants will hire lawyers too late in the appeals process. A lawyer can ensure that a plan participant exhausts the

plan's administrative appeal procedure before bringing a lawsuit and that plan administrators have the participant's strongest evidence before them at the time of the benefit denial. Findings from the present study suggest that consumers want to hire attorneys early in the appeal process when they have a strong claim. However, consumers may be less likely to seek out attorneys in the real world where they have to find them and pay for their services.

More importantly, the present study found that participants who understood the health plan were more likely to make the appropriate decision of not pursing weak claims for denied benefits. The path analysis showed that greater comprehension was associated with fewer appeals, especially of weak claims. From a business perspective, this finding provides a convincing argument for investing money into redrafting SPDs. This finding has important policy implications because it should motivate employers and plan administrators to improve the readability of their SPDs. By improving the readability of plan documents, plan administrators could reduce the number of frivolous lawsuits over plan coverage and, therefore, decrease the administrative costs of sponsoring plans.

Consistent with hypotheses, the present study also found that participants were less likely to appeal denied claims when they viewed the plan as more procedurally fair and were more satisfied with the plan. Therefore, participants' feelings about the health plan influenced their claiming behavior. Skarlicki and Folger (1997) and Roberts and Markel (2001) did not find that procedural fairness influenced claiming behavior, but their research was set in the business context, whereas the present study was set in the healthcare context. Research has found that patients are more likely to file medical malpractice suits against providers with poor patient-provider communication (Levinson,

Roter, Mullooly, Dull, & Frankel, 1997; Moore, Adler, & Robertson, 2000). Results from the present study suggest that plan participants are more likely to sue their healthcare insurers when they are dissatisfied with communication from those insurers. Perhaps, consumers are using their feelings toward their health plan as a substitute heuristic for putting forth the effort necessary to achieve actual comprehension of the plan and to assess whether their claim has been properly denied under the terms of the plan. The present study suggests that plan administrators might be able to reduce the number of appeals filed against them by improving participants' perceptions of their plans. Plan administrators should be highly motivated to reduce the number of appeals filed against them not only because appeals cost money but because as many as 50% of plan denials are reversed (Studdert & Gresenz, 2003).

The present study also found that perceptions of procedural fairness and plan satisfaction were highly correlated. This result is consistent with Murphy-Berman et al.'s (1999) finding that participants felt better about their health plan when they felt the plan was procedurally fair. According to the Ethical Fundamental Obligations Report Card Evaluations program, unfair coverage decisions may lead not only to dissatisfaction with a health plan but also to withdrawal from that health plan, which can be costly to plan administrators (Wynia et al., 2004). I was unsure about how comprehension would influence participants' perceptions of the health plan. In the present study, increased comprehension did not lead to greater plan approval, which would have provided plan administrators with another incentive to redraft their plan documents. Instead, the more participants understood the health plan, the less participants felt the health plan was procedurally fair and the less participants were satisfied with the health plan. Although

speculative, increased comprehension perhaps led to more dissatisfaction because participants realized the limitations of the health plan's benefits and the administrative roadblocks to appealing denied benefits. This result is inconsistent with the Consumer Assessment of Health Plans Survey, which found that poorer comprehension was associated with less plan satisfaction (Venus et al., 2003). Perhaps, the more participants understood the health plan in the face of a pending appeals process, the more they realized the health plan did not provide all of the information they felt was necessary to make informed decisions (EBRI/Commonwealth Fund, 2005).

Other Findings

The present study also attempted to improve comprehension by manipulating task. Consumers engage in reading-to-learn tasks when they attempt to store and retain information for use in the future, such as when they read their SPDs when they first receive them. Consumers engage in reading-to-do tasks when they read with specific objectives and plan to use their newly-acquired information immediately, such as when they revisit their SPDs once a dispute has arisen. In the present study, some participants were told, before they read health plan documents, that they would be denied coverage. This reading-to-do instruction was meant to prompt participants to pay greater attention to relevant information, process information more selectively, and engage in deeper integration of information. The reading-to-do task was supposed to encourage text learning, which promotes deeper understanding of the subject matter and allows application of newly acquired information to novel situations (Kintsch, 1994). As a result, I hypothesized that participants in the reading-to-do condition would demonstrate greater comprehension of the health plan than participants in the reading-to-learn

condition. The present study found no support for this hypothesis. Based on Duffy and Kabance's (1982) reasoning, participants' comprehension should have improved in the reading-to-do task because they would have integrated and organized the health plan information in anticipation of their upcoming appeal. The readability levels required to understand health plan documents suggest that these documents may by too complicated for consumers to understand even when they know ahead of time what information will be important to them. In addition, consumers may be unfamiliar with the appeals process and not realize what information will be critical in that process. On the other hand, the present study may not have adequately manipulated task condition, as discussed below in the section on limitations of the present study. If redrafting facilitates comprehension only when readers are required to integrate the information, failure of the reading-to-do manipulation could be partially responsible for the lack of a redrafting effect.

The present study did find differences in comprehension across the different types of knowledge measured. Declarative knowledge is meaning- and content-based information stored as semantic concepts, schemata, scripts, or prototypes, and procedural knowledge operates on the declarative knowledge stored in long- and short-term memory (Smith, 1994). Participants had better declarative knowledge of medical necessity clauses and better procedural knowledge of claims procedure clauses. This finding makes sense given that medical necessity clauses contain content-based information and claims procedure clauses contain application of concepts. It does not appear that declarative questions were associated with text memory or that procedural questions were associated with deeper text learning (Kintsch, 1994). Redrafting medical necessity clauses to include scenarios and hypothetical problems may improve procedural

knowledge of this clause, and redrafting claims procedure clauses to highlight and define critical content areas may improve declarative knowledge of this clause.

I hypothesized that consumers' health literacy and their experience with the healthcare industry would influence their ability to understand health plan documents. Because nearly all of the participants in Studies 2 and 3 had adequate health literacy, I was not able to determine if higher health literacy was associated with better comprehension of SPD clauses. The sample in the present study did not represent the 90 million American adults that are functionally illiterate (Kirsh et al., 1993). The study sample's health history and insurance status was sufficiently varied to examine the influence of these factors. Nevertheless, across both studies, more experience with the healthcare industry did not lead to better comprehension of plan documents. Experience with the healthcare industry also did not affect plan approval or the propensity to appeal denied claims. One explanation for these findings is that the measures of healthcare industry experience in the present study (e.g., health status, doctor visits, insurance provider, claims experience) were not relevant to the type of knowledge being tested by the comprehension test or to the skills necessary to appeal denied benefits. In addition, very few participants in Study 2 (1.2%) and Study 3 (1.9%) could reflect on the experience of appealing an actual claim. Perhaps, the clauses were too complicated for individuals, regardless of previous experience with technical healthcare documents. Interestingly, the positive effects that redrafting had on certain types of knowledge only existed for participants with health insurance or claims experience. These results suggest that individuals' understanding of simplified healthcare documents improves somewhat

from experience with the health insurance industry. Study 3 sampled both employees and students.

In general, employees had more experience than students with the healthcare industry and the insurance industry. This experience may be why employees demonstrated better comprehension of plan documents than students, especially on the declarative knowledge subscales. Due to the difference between students and employees' experience with the healthcare and insurance industry and the difference between students and employees' levels of education, it may not be appropriate to generalize results from student samples to the working population when studying health plan decision making.

Limitations and Future Studies

One of the biggest weaknesses of the present study, and therefore an area to improve upon in future studies, was the method of redrafting the SPD clauses. For many of the same reasons that legal documents are difficult to read (e.g., their length, complexity, and technical nature; Hartley, 2000; Wogalter et al., 1999), they also are difficult to redraft. In the present study, SPD clauses were redrafted by breaking up complex sentences into simpler sentences, making long words into shorter words, changing the tone from third to second person, reducing the technical nature of the documents by eliminating jargon, enlarging the font, reordering the text, and indenting subcategories (Wogalter et al., 1999). These techniques were used because they improve scores on the Flesch Reading Ease test, Flesch Grade Level test, and Fog Index. A significant limitation of these measures is that they do not capture some of the commonly accepted psycholinguistic principles of redrafting such as improving sentence structure

(English & Sales, 1997; Lieberman & Sales, 1997). Several researchers have been able to improve comprehension of jury instructions by replacing uncommon words with common ones, replacing abstract words with concrete ones, avoiding homonyms and nominalizations, removing prepositional phrases and misplaced phrases, eliminating negatively modified sentences, and using active voice (Charrow & Charrow, 1979; Elwork et al., 1977, 1982). One of the most promising redrafting techniques that was not used in the present study is logical organization of information. For example, two ways of improving the logical organization of information are using a hierarchical structure, where high-level concepts are broken down into lower-level components and then integrated, or an algorithmic structure, where presentation order requires understanding of one concept for understanding of the next concept (Elwork et al., 1982). Other studies have successfully improved comprehension for procedural tasks through visual aids such as flowcharts (Kammann, 1975; Phillips & Quinn, 1993; Wiener et al., 2004).

Although six people made suggestions for improving the readability of each clause used in the present study, more time and effort could have been spent on redrafting the clauses. Future studies should have cognitive linguists and educational specialists involved in the redrafting efforts. Although readability scores are heavily dependent on word count, I attempted to keep the word count similar for the original and redrafted versions in order to avoid changing the meaning of the clauses. Future studies should examine whether shortening the text of SPD clauses—if it is possible to do so without significantly altering their meaning—improves their comprehension. Shortening text has been shown to improve comprehension of medical consent forms (Mann, 1984; Wogalter

et al., 1999). Future studies may want to determine whether shortening texts, improving readability level, or a combination of both strategies improves comprehension the most.

The task manipulation in the present study also could be improved upon. Duffy and Kabance (1982) describe reading-to-learn tasks as tasks where individuals attempt to store and retain information for use in the future and reading-to-do tasks as tasks where individuals read with specific objectives and plan to use their newly-acquired information immediately. The only difference between the reading-to-learn and reading-to-do tasks in the present study was that participants in the reading-to-do task were forewarned that their claim for benefits would be denied. Even if participants remembered this instruction, it was probably not sufficient to motivate participants to engage in deeper integration of the upcoming material. Participants in the present study were asked to take on the daunting task of reading five to seven type-written pages of a SPD and completing a 32-question comprehension test. The task manipulation may have produced greater differences if the study was shorter (e.g., by cutting out the second denial letter and the second set of plan approval measures) or participants received more compensation for completing the study.

Future studies should employ more drastic means of manipulating the task, such as providing a more detailed description of the forthcoming problem, tying compensation to performance, or increasing accountability. In order to hone in on relevant plan language, participants might need to be informed of their ailment, the specific actions the health plan is going to take against them, and their ability to appeal those actions. Participants could receive this information in the form of a benefit denial letter before they read the SPD language. Participants also could be told their compensation for

participating in the study will depend on whether they successfully complete the comprehension test or win their appeal. To increase participants' accountability for their decision to appeal, participants could have to explain their reasoning to a third-party, such as a health plan administrator or another health plan participant. In the present study, participants in the reading-to-do condition did not actually "do" anything. Consumers probably are more motivated to understand health plan language when they are reading their own health plan and facing an actual benefit denial, rather than reading a hypothetical plan and engaging in a simulated appeal of denied benefits. Although the present study benefited from a controlled design, the simulated appeal may lack the external validity necessary to generalize its findings to a real-world appeals process with real consequences (Bornstein & McCabe, 2005). Nevertheless, the present study was a first attempt at identifying factors, such as procedural fairness and plan satisfaction, that should be examined when studying appeal decisions in the real world.

The participant sample and the method of surveying participants are also limitations of the present study. Employee participants in the present study were recruited through the internet, and all participants completed the study over the internet. This methodology provided a larger and more geographically diverse sample population. However, it may have attracted a sample of the population that is disproportionately health literate. Whereas over 30% of English-speaking Americans have inadequate or marginal health literacy (Gazmararian et al., 1999; Gazmararian et al., 2003; Parker & Gazmararian, 2003; Williams et al., 1995), only 3.7% of participants in Study 2 and none of the participants in Study 3 had inadequate or marginal health literacy. Similarly, more participants in Study 2 (98.5%) and Study 3 (98.5%) had a high school diploma than the

national average (84%) according to 2005 U.S. Census data. To give a more accurate measure of comprehension, future studies should strive to recruit more participants with inadequate and marginal health literacy and with less education. Future research also may consider using a different measure of health literacy than the S-TOFHLA.

Although running the study over the internet was realistic because many SPDs are available to employees on-line, future studies might consider providing participants with hard copies of health plan documents. Plan participants may receive or print out hard copies of their SPDs, and plan administrators often mail participants claim denial letters. Yet, the results would probably be similar to the present study because web-based and paper-pencil studies generally yield comparable results (Gosling, Vazire, & Srivastava, 2004). Future research also should assess whether participants actually read the study documents because a national survey conducted by Louis Harris and Associates (1996) found that half of insureds do not read or merely skim materials about their health plans (as cited by Isaacs, 1996). Future studies should ask participants how carefully they read the study documents as Wogalter et al. (1999) did and ask participants if they referred back to the health plan documents when they were completing the comprehension test.

There are several opportunities to determine whether findings from the present study generalize. The present study assessed the readability of 40 SPDs obtained from the internet, employees, and attorneys. Although these SPDs represented employers from across the United States and several types of plans, a larger sample of SPDs would more accurately reflect the readability of SPDs and allow comparison across different plan types. A larger sample of SPDs also would have improved the likelihood that the clauses chosen for Studies 2 and 3 were representative. The clauses selected for redrafting were

chosen based on their representativeness of the quartile of clauses with poor readability, two versions of each type of clause were presented, the clauses were all from different SPDs, and participants read both medical necessity and claims procedure clauses. Nevertheless, there is a risk that the present study's findings are idiosyncratic to the clauses pulled out of the limited number of SPDs collected. Future studies should evaluate comprehension of more than two versions of the same clause. In addition, the present study only examined the readability and comprehension of medical necessity and claims procedure clauses. Future research should look into other clauses. In addition to examining medical necessity and claims procedure clauses, Medill et al. (2006) collected *Firestone* clauses, mental health and substance abuse benefits clauses, pre-existing condition coverage exclusion clauses, and reimbursement or subrogation clauses. There was great variability in inter-rater agreement across the different types of clauses, but there were only small differences in readability across the six topic areas—all clauses were written at reading levels beyond those one might expect the average plan participant to possess.

Participants in the present study engaged in a simulated appeals process based on denial of prospective appeals (i.e., appeals concerning denials of access to services). Future studies should examine whether perceptions of procedural fairness and plan satisfaction differ when participants engage in retrospective appeals (i.e., appeals concerning denial of reimbursement for services already obtained). Results may depend on whether participants can afford to pay for the procedure if the health plan continues to deny coverage. The appeal in the present study concerned denial of surgery to remove varicose veins. Future research should determine whether findings from this study

generalize to other services that are commonly denied and appealed, such as gastric bypass, office consultations with psychiatrists, and magnetic resonance imaging tests (Studdert & Gresenz, 2003). Results may differ depending on whether participants view the sought after treatment as clinically indicated or as elective or cosmetic.

The present study asked participants what *they* would do in the event that a health plan denied them coverage because this line of questioning tapped into the reading-to-do task manipulation and this study focused on whether individual decision makers would themselves pursue a claim. Future studies might consider asking participants what a generic other should do in the same situation. Research has found that perceptions of fairness depend on whether participants are viewing the world from their own or another's perspective (Bègue & Bastounis, 2003; Sutton & Douglas, 2005). Future studies also should parse apart the relationship between plan approval and comprehension to determine if positive plan approval influences the decision to appeal more than high comprehension levels. Instead of using a simulated appeals process, future research could target individuals who actually have been denied coverage and assess their perceptions of their health plans. Studies that examine consumers' actual interactions with health plans should consider using the Health Care Justice Inventory – Health Plan (HCJI – HP), which assesses the trust, impartiality, and participation dimensions of procedural justice (Fondacaro, Frogner, & Moos, 2005).

Conclusion

The present study found that medical necessity and claims procedure clauses in SPDs are written at the college reading level and, thus, above the reading ability one would expect the average plan participant to possess. Indeed, poor performance on

comprehension tests of plan documents confirmed that consumers do not understand these clauses well. These findings indicate that some SPDs may not comply with ERISA § 102(a)'s disclosure requirement. Improving comprehension of SPDs will not be easy, as demonstrated by the lack of a redrafting effect in the present study. Nevertheless, plan administrators should be motivated to make their plans more readable based on the finding that more informed consumers are less likely to pursue futile claims. By reducing the number of frivolous lawsuits over plan coverage, plan administrators can decrease the administrative costs of sponsoring plans.

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Appendix A: Selections from Coding Instruction Book

AN EMPIRICAL STUDY OF SUMMARY PLAN DESCRIPTION LANGUAGE

CODING INSTRUCTION BOOK

Introduction

The purpose of this research study is to measure the readability of the language used in summary plan descriptions (SPDs) for employer-sponsored health care plans that are subject to the Employee Retirement Income Security Act of 1974 (ERISA). In addition to measuring the overall readability of each SPD in the study, the study also measures the readability of the following selected clauses that are typically found in health care plan SPDs:

1. Medical necessity clauses.

2. Claim filing and appeal procedure clauses.

3. *Firestone* clauses.

4. Mental health and substance abuse clauses.

5. Pre-existing condition coverage exclusion clauses.

6. Reimbursement clauses.

Your task is to identify or "code" these clauses in the SPD documents. An explanation of each clause, and the criteria that you should use to identify each clause, are described below in the Definitions and Coding Criteria section for each clause.

Coding Methodology

Each SPD document is accompanied by a coding sheet (see Appendix A). As you identify the relevant clauses in the SPD document, you should:

1. Circle the relevant clause language on the document and indicate the number of the clause that corresponds to the language (i.e., "1" for language that relates to a medical necessity clause, "3" for Firestone clause language, etc.).

2. Each time you identify language in the SPD document as part of a coded clause, write the page number(s) where the language is found under the appropriate clause heading on the coding sheet.

This methodology ensures that the research assistant who is responsible for inputting the coded language into the computer system has two ways to verify the language to be coded as part of each clause.

Definitions and Coding Criteria

General Instructions

The language that you select and code as part of a SPD clause may be used in subsequent studies to test the comprehension level of individual readers. To make these subsequent studies as realistic as possible, you should *include* as part of the coded language *any relevant topic headings or subheadings* used in the document that correspond to the coded language. In addition, *as a general rule you should include the entire paragraph in which the coded language appears* so that a human reader will have the context necessary to comprehend the significance of the clause language.

Medical necessity clauses represent the one exception to this general rule. Specific detailed criteria for coding medical necessity clauses are described in the next section.

1. Medical Necessity Clauses

a. Definition

Medical necessity clauses restrict the type of medical treatment that plans are obligated to cover.[1] A medical necessity clause is an optional plan design feature that is used to reduce the cost of the health care plan by limiting the scope of coverage to treatment that is deemed to be medically necessary by the plan administrator.

In general, medical necessity clauses function:

(1) as a general prerequisite for coverage (e.g., charges are considered covered expenses to the extent that the services and supplies provided are recommended by a physician and are necessary for the care and treatment of an injury or a sickness);

(2) as a criterion for providing specific covered services (e.g., hearing aids are covered only when medically necessary); or

[1] David M. Eddy, *Benefit Language: Criteria that Will Improve Quality While Reducing Costs*, 275 JAMA 650 (1996).

(3) as a general exclusion from coverage (e.g., services and supplies to the extent that they are not medically necessary are excluded).[2]

b. Coding Criteria for Medical Necessity Clauses

Medical necessity clauses require the most detailed coding criteria because SPDs vary in how medical necessity clauses are presented. In coding a medical necessity clause, you should determine if the relevant language conveys *primary information* or *tertiary information.* Primary information should be coded as part of the medical necessity clause. Tertiary information should not be coded as part of the medical necessity clause.

i) Primary Information

References to medical necessity in the SPD document are to be coded as primary information if:

(1) the reference is part of an explanation of the prerequisites for coverage;

(2) the reference is part of an explanation of covered services or benefits;

(3) the reference is part of an explanation of the services or benefits that are excluded from coverage; or

(4) the language is part of a definition or a glossary description of the term "medical necessity," "medically necessary," or similar terminology.

Some SPD documents may contain a general provision stating that all covered services or benefits must be medically necessary, followed by a detailed list of the types of services and benefits that are covered by the plan. In this situation, you should code only the general provision as part of the medical necessity clause and *not code the detailed list of services and benefits* that follows the general provision as part of the medical necessity clause.

Other SPD documents may describe the types of services and benefits that are covered by the plan, and selectively qualify certain listed services and benefits by indicating that the particular service or benefit will be covered only if it is medically necessary. In this situation, you should *code these particular services and benefits* as part of the medical necessity clause.

Some SPD documents may describe several options available under the plan (e.g., PPO, POS, HMO options), with each option containing a medical necessity clause. In this situation, you should *code the medical necessity clause language for each plan*

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[2] CLARK C. HAVIGHURST, *HEALTH CARE CHOICES: PRIVATE CONTRACTS AS INSTRUMENTS OF HEALTH REFORM 125–26 (*American Enterprise Institute for Public Policy Research 1995).

option, even if the SPD document language used to describe the medical necessity clause for each plan option is identical.

ii) Tertiary Information

References in the SPD document to medical necessity are tertiary and should not be coded as part of the medical necessity clause if the reference is:

> (1) part of an explanation of the requirements of the plan for the pre-authorization of medical treatment, utilization review procedures, procedures for reviewing the appropriate length or continuation of a hospital stay, procedures for the coordination of benefits paid by multiple plans, or case management review procedures;
>
> (2) included as part of *a separate description of* prescription drug benefits, disability plan benefits, dental plan benefits, vision plan benefits, or other welfare plan benefits that are not medical benefits;
>
> (3) included as part of a description of mental health and substance abuse benefits;[3]
>
> (4) included as part of a description of the procedures for claims filing and appeals of denied claims;[4]
>
> (5) ad hoc references to medical necessity, or cross-references to other provisions of the SPD document, already coded as primary and included as part of the document's medical necessity clause; or
>
> (6) a cross-reference to medical necessity that is included as part of an explanation of other federal laws that impact the administration of the plan, such as the Family and Medical Leave Act (FMLA), the Health Insurance Portability and Accountability Act (HIPAA), and the Consolidated Omnibus Budget Reconciliation Act (COBRA).

[3] In this situation, references to medical necessity are coded as part of the mental health and substance abuse clause.

[4] In this situation, references to medical necessity are coded as part of the claims filing and appeal procedure clause.

3. Claim Filing and Appeal Procedure Clauses

a. Definition

Claim filing and appeal procedure clauses inform plan participants of the procedure the participant must follow to submit a claim for health care plan benefits and to appeal a claim for health care plan benefits that has been denied by the plan administrator. The legal source for claim filing and appeal procedure clauses is ERISA Section 503,[5] which provides in relevant part that every plan must "afford a reasonable opportunity to any participant whose claim for benefits has been denied for a full and fair review."[6] Department of Labor regulations implementing Section 503 set forth specific and detailed requirements for the claims procedures used by group health plans.[7]

b. Coding Criteria for Claim Filing and Appeal Procedure Clauses

Subject to the exceptions listed below, you should code as part of the claim filing and appeal procedure clause any language in the SPD document that describes the procedure the participant must follow to submit a claim for health care benefits and to appeal a claim for health care benefits that has been denied by the plan administrator. The following information in the SPD document should *not* be coded as part of the claim filing and procedure clause:

> (1) a description of the requirements of the plan for the pre-authorization of medical treatment, utilization review procedures, procedures for reviewing the appropriate length or continuation of a hospital stay, procedures for the coordination of benefits paid by multiple plans, or case management review procedures;
>
> (2) claim filing and appeal procedures that are contained in *a separate description of* prescription drug benefits, disability plan benefits, dental plan benefits, vision plan benefits, or other welfare plan benefits that are not medical benefits;
>
> (3) claim filing and appeal procedures that are unique to mental health and substance abuse benefits;[8] or
>
> (4) references to claims and appeals that are contained in the model statement of ERISA rights that is required by ERISA Section 104(c) and described in Department of Labor Regulation 2520.102-3(t)(2).[9]

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[5] 29 U.S.C. § 1133(2).

[6] The complete text of ERISA Section 503 is contained in Appendix B.

[7] See 29 C.F.R. § 2560.503-1.

[8] In this situation, claim filing and appeal procedures that are unique to mental health and substance abuse benefits are coded as part of the mental health and substance abuse clause.

Some SPDs may describe the procedure for filing an initial claim for plan benefits separately from the procedure for appealing a claim that has been denied. Other SPDs may describe claim filing and claim appeal procedures in one section. You should code all of the language in the SPD document that relates to the filing of claims and the appeal of denied claims as part of the claim filing and appeal procedure clause, whether those provisions are contained in a single section or in separate sections.

Some SPDs may include a sample form for submitting a claim or appealing a claim for benefits that has been denied by the plan administrator. You should code any sample claim forms as part of the claim filing and appeal procedure clause.

[9] 29 C.F.R. §2520.102-3(t)(2). The text of the Department of Labor's model statement of ERISA rights is contained in Appendix C.

Appendix B: Original and Redrafted Versions of Clauses

Medical Necessity Clause, Plan 1

Original	Redrafted
COVERED BENEFITS A Member shall be entitled to the Covered Benefits as specified below, in accordance with the terms and conditions of this Certificate. Unless specifically stated otherwise, in order for benefits to be covered, they must be Medically Necessary. For the purpose of coverage, HMO may determine whether any benefit provided under the Certificate is Medically Necessary, and HMO has the option to only authorize coverage for a Covered Benefit performed by a particular Provider. Preventive care, as described below, will be considered Medically Necessary. To be Medically Necessary, the service or supply must: • be care or treatment as likely to produce a significant positive outcome as, and no more likely to produce a negative outcome than, any alternative service or supply, both as to the disease or injury involved and the Member's overall health condition; • be care or services related to diagnosis or treatment of an existing illness or injury, except for covered periodic health evaluations and preventive and well baby care, as determined by HMO; • be a diagnostic procedure, indicated by the health status of the Member and be as likely to result in information that could affect the course of treatment as, and no more likely to produce a negative outcome than, any alternative service or supply, both as to the disease or injury involved and the Member's overall health condition; • include only those services and supplies	**COVERED BENEFITS** A member of this Health Plan is entitled to the covered benefits as described below. In order for benefits to be paid for, or covered, they must be considered "medically necessary." The Health Maintenance Organization (HMO) that runs this Plan decides whether benefits are medically necessary. If the HMO determines that one of the benefits listed below is medically necessary, the benefit will be covered by the company. In addition, the HMO may only authorize a particular provider to perform a covered benefit. Preventive care, as described below, is always considered medically necessary. To be medically necessary, services and supplies must meet all the standards described below. • To be medically necessary, the service or supply must be as likely to have a significant *positive* impact on the member's illness and the member's overall health as any other option. The service or supply cannot have more of a *negative* impact on the member's illness and the member's overall health than any other option. • To be medically necessary, the service or supply must be care or services to diagnose or treat an *existing* illness or injury. The HMO provides an exception to this rule for care or services related to periodic health evaluations, preventive care, or well baby care. • To be medically necessary, the service or supply must be a procedure needed to diagnose the member's health status. This procedure must be as likely to produce information that could affect the

that cannot be safely and satisfactorily provided at home, in a Physician's office, on an outpatient basis, or in any facility other than a Hospital, when used in relation to inpatient Hospital Services; and

• as to diagnosis, care and treatment be no more costly (taking into account all health expenses incurred in connection with the service or supply) than any equally effective service or supply in meeting the above tests.

In determining if a service or supply is Medically Necessary, HMO's Patient Management Medical Director or its Physician designee will consider:

• information provided on the Member's health status;

• reports in peer reviewed medical literature;

• reports and guidelines published by nationally recognized health care organizations that include supporting scientific data;

• professional standards of safety and effectiveness which are generally recognized in the United States for diagnosis, care or treatment;

• the opinion of Health Professionals in the generally recognized health specialty involved;

• the opinion of the attending Physicians, which have credence but do not overrule contrary opinions; and

• any other relevant information brought to HMO's attention.

Inpatient Hospital & Skilled Nursing Facility Benefits

As an exception to the Medically Necessary requirements of this Certificate, the following coverage is provided for a mother and newly born child:

course of treatment as any other option. The procedure cannot have more of a negative impact on the member's illness and the member's overall health than any other option.

• To be medically necessary, the service or supply must include only inpatient care that cannot be received as safely and satisfactorily as outpatient care or care received at home, a physician's office, or a facility other than a hospital. Inpatient care requires an overnight stay, whereas outpatient care does not.

• To be medically necessary, the service or supply must be no more costly than any equally effective service or supply. The cost must take into account *all* medical expenses resulting from the service or supply.

In determining if a service or supply is medically necessary, the HMO will consider:

• information about the member's health status;

• reports in peer reviewed medical journals;

• reports and guidelines that are published by nationally recognized health care groups and use scientific data to support their claims;

• professional standards of safety and effectiveness that are generally applied to diagnosis, care and treatment in the United States;

• the opinions of health professionals who specialize in the health problem at issue;

• the opinions of the member's physicians, whose opinions carry weight but do not overrule differing opinions; and

• any other relevant information brought to the HMO's attention.

1. a minimum of 48 hours of inpatient care in a Participating Hospital following a vaginal delivery;

2. a minimum of 96 hours of inpatient care in a Participating Hospital following a cesarean section; or

3. a shorter Hospital stay, if requested by a mother, and if determined to be medically appropriate by the Participating Providers in consultation with the mother.

Benefits for Temporomandibular Joint Disorders (TMJ)

Benefits for TMJ will be provided when preauthorized by HMO. This includes diagnostic and surgical treatment of TMJ that is Medically Necessary as a result of an accident, a trauma, a congenital defect, a develop-mental defect, or a pathology.

EXCLUSIONS AND LIMITATIONS

Exclusions

The following are not Covered Benefits except as de-scribed in the Covered Benefits section of this Certificate or by a rider attached to this Certificate:

• Cosmetic Surgery, or treatment relating to the consequences of, or as a result of, Cosmetic Surgery, other than Medically Necessary Services. This exclusion includes, but is not limited to, surgery to correct gynecomastia and breast augmentation procedures, and otoplasties. Reduction mammoplasty, except when deter-mined to be Medically Necessary by an HMO Medical Director,

Inpatient Hospital & Skilled Nursing Facility Benefits

As an exception to the medically necessary requirements described above, the following coverage is provided for a mother and newly born child:

1. a minimum of 48 hours of inpatient care, in a hospital approved by the HMO, following a vaginal delivery;

2. a minimum of 96 hours of inpatient care, in a hospital approved by the HMO, following a cesarean section (C-section); or

3. a shorter hospital stay, if requested by a mother, and if judged medically appropriate by the health care provider.

Benefits for Temporomandibular Joint Disorders (TMJ)

Benefits for TMJ must be authorized by the HMO before they are received. This is the case even if the TMJ is medically necessary due to an accident, a birth defect, a developmental defect, or a disease.

EXCLUSIONS AND LIMITATIONS

Exclusions

Except as described above in the Covered Benefits section or in supplemental materials, the following are *not* covered benefits:

• Non-medically necessary cosmetic surgery or non-medically necessary treatment to address the consequences of an earlier cosmetic surgery. This includes, but is not limited to, surgery for breast enlargement or reduction,

is not covered.

• Non-medically necessary services, including but not limited to, those services and supplies:

1. which are not Medically Necessary, as determined by HMO, for the diagnosis and treatment of illness, in-jury, restoration of physiological functions, or covered preventive services;

2. that do not require the technical skills of a medical, mental health or a dental professional;

3. furnished mainly for the personal comfort or convenience of the Member, or any person who cares for the Member, or any person who is part of the Member's family, or any Provider;

4. furnished solely because the Member is an inpatient on any day in which the Member's disease or injury could safely and adequately be diagnosed or treated while not confined;

5. furnished solely because of the setting if the service or supply could safely and adequately be furnished in a Physician's or a dentist's office or other less costly setting.

DEFINITIONS

• Medically Necessary, Medically Necessary Services, or Medical Necessity. Services that are appropriate and consistent with the diagnosis in accordance with accepted medical standards as described in the Covered Benefits section of this Certificate. Medical Necessity, when used in relation to services, shall have the same meaning as Medically Necessary Services. This definition applies only to the determination by HMO of whether health care services are

abnormal growth of breasts in males, and large ears.

• Non-medically necessary services, including but not limited to, the services described below.

1. Services that are not medically necessary, as determined by the HMO, for the diagnosis and treatment of illness or injury, for the restoration of body functions, or for covered preventive services.

2. Services that do not require the technical skills of a medical, mental health or dental professional.

3. Services that are delivered mainly for the personal comfort or convenience of the member, any person who cares for the member, any person who is part of the member's family, or any provider.

4. Services that are delivered solely because the member is an inpatient when the member's disease or injury could safely and adequately be diagnosed or treated as an outpatient.

5. Services that are delivered solely because of the setting when the service or supply could be safely and adequately provided in a physician's office, a dentist's office, or another less costly setting.

DEFINITIONS

• Medically necessary, medically necessary services, or medical necessity.

These are services that are considered appropriate and consistent with the diagnosis according to accepted medical standards as described in the Covered Benefits section. Medical necessity, when used in relation to services, has the same meaning as medically necessary services. This

Covered Benefits under this Certificate.	definition applies only to the determination by the HMO of whether health care services are covered benefits under this policy.

Medical Necessity Clause, Plan 2

Original	Redrafted
SOME TERMS AND EXPLANATIONS **What is 'Medically Necessary'?** The medical plan options pay benefits for eligible expenses that are considered medically necessary by the claims administrator. The claims administrator considers a treatment, service, or supply as medically necessary if it is: • Ordered and approved by a licensed physician • Reasonably required for the diagnosis or treatment of a medical symptom or condition • A treatment that is economical, safe, and provided in a manner and setting consistent with generally accepted United States medical standards • Not primarily for the convenience of the patient or the health care provider • The most appropriate level of treatment, service, or supply that can be safely provided. (With respect to hospitalization, acute care as an inpatient is judged to be necessary based on the type of services the patient is receiving or the severity of the patient's condition. It also means that safe and adequate care cannot be received as an outpatient or in a less intense medical setting.) • Not educational, vocational, experimental, or investigational in nature except for individuals with diabetes. The plan provides for education about diabetes. • Not specifically excluded by the plan. When you are hospitalized, your provider and the claims administrator determine how long your hospital stay is medically	**TERMS AND EXPLANATIONS** **Medically Necessary** The Health Plan will pay for medical expenses that the Plan's claims administrator considers "medically necessary." A treatment, service, or supply is medically necessary if it is: • ordered and approved by a licensed physician; • reasonably required to diagnose or treat a medical symptom or condition; • cost-effective and safe; • generally accepted according to national medical standards; • the most appropriate level of treatment, service, or supply that can be safely provided; • Inpatient care requires an overnight stay, whereas outpatient care does not. Inpatient care is only medically necessary if the same care cannot be received as an outpatient or in a less intense medical setting than a hospital. This judgment will be based on the type of services the patient is receiving or the severity of the patient's condition. • not for the purpose of education or an experiment (except for educating patients about their diabetes); • not mainly for the convenience of the patient or the health care provider; and • not specifically listed in this Plan under the section Medical Expenses that are Not Covered.

necessary. Even though your physician or other health care provider prescribes, orders, recommends, or approves a service or supply, it is not automatically considered medically necessary. This rule applies even if the service or supply is not listed in this guide as an ineligible expense. Consequently, pre-certification of expenses is essential to determine eligibility for benefits.

Hospital inpatient services are medically necessary if they cannot be safely provided to you as an outpatient.

Adult physicals, newborn baby care and childhood immunizations that you receive from a network provider are considered medically necessary. Maternity hospital stays for mothers and newborn children are considered medically necessary for at least 48 hours following a normal vaginal delivery or 96 hours following a cesarean birth.

Out-of-network services and supplies provided to a newborn child are considered medically necessary if they:

- Meet all the requirements listed in the Eligible Medical Expenses section.
- Are provided to treat a diagnosed sickness or injury (including a congenital defect or birth abnormality).

EMERGENCY CARE AND HOSPITALIZATION

Eligible Medical Expenses

- Ambulance service to a local facility for a life-threatening condition or a condition that could cause serious harm to your body

  (The medical plan options also cover air ambulance service to the nearest appropriate facility when this service is medically necessary. There is no coverage under any of the medical plan

Hospitalization

Hospital inpatient services are medically necessary if they cannot be safely provided to you as an outpatient.

When you are in the hospital, your health care provider and the claims administrator decide how long your hospital stay is medically necessary. Even though your health care provider prescribes or recommends a service or supply, it is not automatically considered medically necessary. This rule applies even if the service or supply is not specifically listed in this Plan under the section Medical Expenses that are Not Covered. The best way to make sure the services and supplies you receive will be covered is to ask the claims administrator *before* you receive them.

Preventative Care

From Network Providers

Network providers are those doctors that have an agreement to provide care to patients with this Plan and be paid by this Plan for "medically necessary" services.

Adult physicals that you receive from a network provider are considered medically necessary.

Newborn baby care and childhood immunizations from a network provider are considered medically necessary. Hospital stays for mothers and newborns are considered medically necessary for at least 48 hours following a normal vaginal delivery or 96 hours following a cesarean section (C-section).

From Out-of-Network Providers

Out-of-network services and supplies provided to a newborn child are considered medically necessary if they:

- Meet all the criteria listed in the section on Covered Medical Expenses.
- Are provided to treat a diagnosed

options for ambulance use when there is no emergency.)

• Medically necessary surgery that results from a previous cosmetic surgery (Cosmetic surgery performed mainly to change a person's appearance is not an eligible expense.)

• Educational expenses related to diabetes, when medically necessary and prescribed by a physician and approved by the claims administrator

• Infertility services, including diagnostic services to determine the cause of infertility, and medical procedures required to correct a physical condition causing infertility

  • Further, administrative fees related to non-medically necessary infertility services, such as egg and sperm donor search fees and travel expenses, also are **not** eligible.

• Temporomandibular joint (TMJ) syndrome, including medically necessary initial surgical consultation and surgical treatment of dysfunction of the temporomandibular joint. (The medical plan options do not cover therapy [before or after surgery], appliances or the shortening or lengthening of the maxilla or mandible for cosmetic purposes or for correction of malocclusion.)

Ineligible Medical Expenses

• Charges for services or supplies that are not medically necessary

• Expenses related to court-ordered treatment, unless certified as medically or psychologically necessary

• Expenses related to infertility administration fees that are not medically necessary, such as egg and sperm costs and donor search fees

sickness or injury, including a birth defect.

EMERGENCY CARE AND HOSPITALIZATION

Covered Medical Expenses

• Ambulance service to a local hospital for a life-threatening condition or a condition that could cause serious harm to the patient’s body.

• Helicopter ambulance service to the nearest hospital that is equipped to handle the patient’s condition when this service is medically necessary.

• There is no coverage for any ambulance service when there is no emergency.

• Medically necessary surgery that results from a previous cosmetic surgery

  • Cosmetic surgery performed mainly to change the way a person looks is not covered.

• Educational expenses for patients with diabetes, when prescribed by a doctor and approved by the claims administrator

• Infertility services

  • When a couple cannot get pregnant, the Plan will cover tests to determine the cause of infertility and medical procedures to fix it

  • Expenses related to non-medically necessary infertility services, such as egg and sperm donor search fees and travel expenses, are *not* covered.

• Temporomandibular joint (TMJ) syndrome, including medically necessary surgery.

  • The Plan does not cover therapy before or after surgery, devices or procedures to shorten or lengthen the jaw bones for cosmetic or

GLOSSARY

Medically necessary In general, services or supplies that meet the following criteria:

- Are appropriate and necessary for the symptoms, diagnosis or treatment of the medical condition, disease, injury or illness.
- Are provided for the diagnosis or direct care and treatment of the medical condition, disease, injury or illness.
- Meet the standards of sound medical practice in the medical community in the service area and that, if omitted, would adversely affect the patient's medical condition.
- Are not primarily for the convenience of the patient or health care provider.
- Are the most appropriate level or amount that can safely be provided.

The medical and dental plans pay benefits for services and supplies that are considered medically necessary, as determined by the plan administrator. The fact that a physician or other health care provider prescribes or orders the service or supply does not make it a medically necessary, eligible expense.

orthodontic purposes.

Medical Expenses that are Not Covered

- Charges for services or supplies that are not medically necessary
- Expenses related to court-ordered treatment, unless the claims administrator decides the expenses are medically or psychologically necessary
- Expenses related to infertility expenses that are not medically necessary, such as egg and sperm costs and donor search fees

GLOSSARY

Medically Necessary

In general, services or supplies are medically necessary if they:

- are appropriate and necessary and are provided to diagnose or treat the injury or illness;
- meet the standards of medical practice in the local medical community;
- would negatively affect the patient's medical condition if not provided;
- are not provided mainly for the convenience of the patient or health care provider; and
- are provided at the most appropriate level that is safe.

The Plan pays for services and supplies that the claims administrator deems medically necessary. The fact that a health care provider prescribes or orders the service or supply does not, by itself, make it medically necessary.

Claims Procedure Clause, Plan 1

Original	Redrafted
CLAIMS INFORMATION AND APPEAL PROCEDURES **How to Obtain Benefits** When you receive Covered Services, a claim must be filed for you to obtain benefits. Network Providers will file claims for you. If you need to submit the claim yourself for Covered Services (such as claims for treatment by an Out-of-Network Provider), you should use a claim form. These claim forms are available in your human resources department or on the human resources page of the Intranet. You can also obtain forms by calling the Customer Service Center at the number on the back of your insurance card. The claim form, as well as your insurance card, provides the correct address to where claims should be sent. **Medical Claim Submission** A claim form must be submitted to the Plan's Claims Administrator at the address that is indicated on the back of your insurance card. Claims must be submitted within 90 days of receiving Covered Services and must include sufficient data to determine what benefits are covered by the Plan. Failure to submit a claim within 90 days will not reduce a benefit if you or your Provider can show that the claim was submitted as soon as reasonably possible. However, claims first submitted more than 180 days after the date of the Covered Service may be denied for lack of timely filing. **Payment Determinations on Initial Claims** The Plan endeavors to provide quick	**CLAIMS AND APPEALS** **Getting Services Paid for by the Plan** When you receive services that are covered by the Plan, a claim must be filed for the Plan to pay for the services. Health care providers who have network agreements to work with the Plan will file claims for you. When you receive services from an out-of-network provider, you need to submit the claim form yourself. The Plan provides a claim form. You can get claim forms from your employer's human resources department or website. You can also obtain forms by calling the Customer Service Center at the number on the back of your insurance card. The claim form and your insurance card both provide the address where claims should be sent. **Medical Claim Submission** A claim form must be mailed to the Plan's Claims Administrator at the address on your insurance card. Claims must be submitted within 90 days of receiving services and must include enough information for the administrator to determine which of the services you received are covered by the Plan. If it takes you longer than 90 days to submit a claim, you can still get benefits. For this to happen, you or your health care provider must show that the claim was submitted as soon as it was reasonably possible. If it takes you longer than 180 days to submit your claim, your benefits may be denied for not filing in a timely manner.

processing of all health insurance Claims. There are two types of Claims that may be filed under the Plan: Pre-service Claims and Post-service Claims. A Pre-service Claim is a request for benefits prior to receipt of treatment or a Pre-authorization request as required under the Plan (see the Preauthorization section of the Plan for benefits requiring Pre-authorization). A Post-service Claim is a Claim for benefits after the treatment has already been rendered. As illustrated below, Pre-service Claims and Post-service Claims are treated differently by the Plan. Moreover, the Plan will treat Pre-service Claims differently based upon whether the Claim is an Urgent Care Claim. For purposes of this Claims Information and Appeal Procedures section of this Summary Plan Description, an Urgent Care Pre-service Claim is any Claim for medical care or treatment with respect to which the application of the time periods for making non-urgent care determinations could seriously jeopardize the life or health of the claimant or the ability of the claimant to regain maximum function or, in the opinion of a physician with knowledge of the claimant's medical condition, would subject the claimant to severe pain that cannot be adequately managed without the care or treatment that is the subject of the Claim.

Determinations of Urgent Care Pre-service Claims will be made by the Claims Administrator as soon as possible, taking into account the medical necessity, and notification of such determination shall be given to the Member not later than 72 hours from the time the Urgent Care Pre-service Claim is received unless the Member failed to provide sufficient information in order for the Claims Administrator to determine whether, or to what extent, benefits are covered or payable under the Plan. In the case of such a failure, the Claims Administrator shall notify the claimant as soon as possible, but not later than 24 hours after receipt of the Claim, of the specific information necessary to

Decisions about Claims

The Plan tries to process all claims quickly. There are two types of claims that may be filed under the Plan.

• A Pre-service Claim is a request for benefits *prior* to receiving treatment, such as a pre-authorization request.

  • A pre-authorization request is a request that the Plan determine whether a proposed service is covered and is medically necessary. For some types of services, a pre-authorization request is required.

• A Post-service Claim is a claim for benefits *after* the treatment has been received.

• As described below, Pre-service Claims and Post-service Claims are treated differently by the Plan. The Plan treats Pre-service Claims differently depending on whether the claim is for care that is needed urgently or not.

Urgent Care Pre-service Claims

An Urgent Care Pre-service Claim is any claim for medical care that is needed immediately. Urgent Care Pre-service Claims are processed more quickly than claims for non-urgent care for several reasons. In a doctor's opinion, a delay might endanger the health of the patient, reduce the patient's chance of a full recovery, or subject the patient to severe pain that cannot be managed without the requested services.

Urgent Care Pre-service Claim decisions will be made by the Claims Administrator as soon as possible. The Claims Administrator will consider the medical necessity of the service. You will learn of the Claims Administrator's decision within 72 hours from the time the claim was received. If you did not give the Claims Administrator enough information to

complete the Claim. The claimant will be given 48 hours after receipt of the notice to provide the requested information. Within 48 hours of its receipt of the requested information, the Claims Administrator shall notify the claimant of its determination. If the claimant fails to timely provide the requested information, the Claims Administrator will notify the claimant of its determination within 48 hours after the expiration of the time to provide the information. If a claimant files an Urgent Care Pre-service Claim improperly, the Claims Administrator will notify the claimant of the improper filing and how to correct it as soon as possible (but not later than 24 hours) after the failure is discovered. This notice may be oral, unless written notification is requested by the claimant. Non-urgent care Pre-service Claims will be determined by the Claims Administrator within a reasonable period of time appropriate to the medical circumstances, and notification of such determination shall be given to the Member not later than 15 days from the time the non-urgent care Pre-service Claim is received. This 15-day period may be extended if the Claims Administrator determines that the extension is necessary due to matters beyond the control of the Plan and properly notifies the Member of such extension prior to the expiration of the initial 15-day period. The extension notice shall include the circumstances requiring the extension and the expected date of the determination. If the extension is requested because of the need for additional information, the Claims Administrator will notify the claimant of the needed information within the initial 15-day period and pend the Claim until the information is received. The claimant will be given 45 days after receipt of the notice to provide the requested information. Within 15 days of its receipt of the requested information, the Claims Administrator shall notify the claimant of its	determine which of the benefits you want are covered by the Plan, it might take longer. If you did not provide enough information, the Claims Administrator will notify you as soon as possible, but no later than 24 hours after receiving the claim. The Claims Administrator will tell you what information is needed to complete the claim. You will have 48 hours to provide the requested information. After you provide the requested information, you will be notified of the Claims Administrator's decision within 48 hours. If you do not provide the requested information in time, you will be notified of the Claims Administrator's decision within 48 hours after the requested information was due. If you do not file an Urgent Care Pre-service Claim correctly, the Claims Administrator will notify you of the problem and tell you how to fix it. The Claims Administrator will contact you as soon as possible, but no later than 24 hours after the problem is discovered. Notice of the problem may only be given to you verbally, unless you request written notice. **Non-urgent Care Pre-service Claims** Non-urgent Care Pre-service Claim decisions will be made by the Claims Administrator within a reasonable period of time depending on the medical circumstances. You will learn of the Claims Administrator's decision no later than 15 days from the time the claim was received. This 15-day period may be extended if the Claims Administrator determines that it is necessary due to matters beyond the Plan's control. If an extension is needed, you will be notified before the initial 15-day period is over. The notice will inform you of the reasons for the extension and the date the Claims Administrator expects to make a decision about your claim. If the Claims Administrator needs more information to

determination. If the claimant fails to timely provide the requested information, the Claims Administrator will notify the claimant of its determination within 15 days after the expiration of the time to provide the information. If the claimant files a non-urgent care Pre-service Claim improperly, the Claims Administrator will notify the claimant of the improper filing and how to correct it as soon as possible (but not later than 5 days) after the failure is discovered. This notice may be oral, unless written notification is requested by the claimant. If a Member has already received approval for a course of treatment to be provided over a specified number of treatments or a specified period of time, any cutback in that course of treatment is considered under these rules as an adverse benefit determination entitling the Member to utilize the Plan's appeals procedures outlined below. Any such denial will be done sufficiently in advance of the cutback to allow the Member to appeal and obtain a determination on review before the benefit is reduced. If a Member has already received approval for a course of treatment and the Member desires to extend the treatment beyond the treatment already approved, such extension will be treated as a new Claim, but the Plan shall notify the Member of its determination regarding Urgent Care benefits as soon as possible, taking into account the medical necessity, not later than 24 hours after receipt of the request. However, if a request for extended treatment involving Urgent Care is not made at least 24 hours prior to the end of the already approved treatment, the request will instead be treated as an Urgent Care Claim, as discussed above. Post-service Claims will be determined by the Claims Administrator within a reasonable period of time, and notification of such determination shall be given to the Member	make a decision, the Claims Administrator will notify you within the initial 15-day period. The Claims Administrator will hold the claim until the requested information is received. After the Claims Administrator tells you what information is missing, you have 45 days to provide the requested information. After you provide the requested information, you will be notified of the Claims Administrator's decision within 15 days. If you do not provide the requested information in time, you will be notified of the Claims Administrator's decision within 15 days after the requested information was due. If you do not file a Non-urgent Care Pre-service Claim properly, the Claims Administrator will notify you of the problem and tell you how to fix it. The Claims Administrator will contact you as soon as possible, but no later than 5 days after the problem is discovered. Notice of the problem may only be given to you verbally, unless you request written notice. If you already have received approval to receive a certain number of treatments or to receive treatment for a certain length of time, any reduction in your treatment is considered a benefit decision against you. If the Plan makes a benefit decision against you, you are entitled to appeal the Plan's decision, as described below. If the Plan decides to reduce your treatment, the Plan will inform you of its decision in time for you to appeal the decision and hear back before the reduction takes place. If you already have gotten permission to receive a certain number of treatments or to receive treatment for a certain length of time and you request more treatment, your request will be treated as a new claim. The Plan will notify you of its decision about Urgent Care Claims as soon as possible. The Claims Administrator will take into account the medical necessity of the services, and will notify you no later than 24

not later than 30 days after receipt of the Claim. The Plan may extend this 30-day period by 15 days if the Claims Administrator determines that the extension is necessary due to matters beyond the control of the Plan and properly notifies the Member of the extension prior to the expiration of the initial 30-day period. The extension notice shall include the circumstances requiring the extension and the expected date of the determination. If the extension is requested because of the need for additional information, the Claims Administrator will notify the claimant of the needed information within the initial 30-day period and pend the Claim until the information is received. The claimant will be given 45 days after receipt of the notice to provide the requested information. Within 15 days of its receipt of the requested information, the Claims Administrator shall notify the claimant of its determination. If the claimant fails to timely provide the requested information, the Claims Administrator will notify the claimant of its determination within 15 days after the expiration of the time to provide the information.

If your Claim is denied by the Claims Administrator, the denial notice will provide:

• the specific reason(s) for the denial, and, if applicable, either the specific internal rule, guideline, protocol or other similar criterion (if any) relied upon in making the denial, or a statement that the rule, guideline, protocol or other similar criterion that was relied upon in making the denial and that a copy of such rule, guideline, protocol or other similar criterion will be provided free of charge upon request

• references to the part of the Plan on which the denial is based

• a description of any additional material or information necessary for you to perfect your Claim and an explanation

hours after receiving your request. If you want more treatment involving urgent care, you have to make your request at least 24 hours before the already approved treatment is finished. Otherwise, your request will be treated as an Urgent Care Claim, as described above.

Post-service Claims

Post-service Claims will be decided by the Claims Administrator within a reasonable period of time, but no later than 30 days after your claim is received. This 30-day period may be extended by 15 days if the Claims Administrator determines that it is necessary due to matters beyond the Plan's control. If an extension is needed, you will be notified before the initial 30-day period is over. The notice will tell you the reasons for the extension and the date the Claims Administrator expects to make a decision about your claim. If the Claims Administrator needs more information to make a decision, the Claims Administrator will notify you within the initial 30-day period. The Claims Administrator will hold the claim until the requested information is received. After the Claims Administrator tells you what information is missing, you have 45 days to provide the requested information. After you provide the requested information, you will be notified of the Claims Administrator's decision within 15 days. If you do not provide the requested information in time, you will be notified of the Claims Administrator's decision within 15 days after the requested information was due.

If your claim is denied by the Claims Administrator, the denial notice will provide you with the information described below.

• The denial notice will inform you of the specific reasons for the denial. If applicable, the denial notice will either include the rule or protocol on which the denial is based, or it will state that the

why such material or information is necessary

• appropriate information as to the steps to be taken if you desire to appeal the denial, including notice of applicable time limits, and a statement regarding your right to bring suit under Section

502(a) of ERISA following an adverse benefit determination on review

• if the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, an explanation of the scientific or clinical judgment for such denial that applies the terms of the Plan to your medical circumstances, or a statement that such explanation will be provided free of charge upon request

• a description of the expedited review process for Urgent Care Pre-service Claims.

The Claims Administrator may orally provide you the above information if your Urgent Care Pre-service Claim is denied if written notification is subsequently furnished to you not later than 3 days after the oral notification.

Appeals of Plan Determinations, Including Time Limits

If you have a question about benefits, you may contact the Customer Service Center at the number listed on the back of your insurance card. Most issues can be resolved by the Customer Service Center and do not require a formal appeal.

If you (or, a Provider) disagree with a benefit determination made by the Plan about coverage, payment or a Preauthorization request for services, you may request a formal Plan Review ("Plan Review") within 180 days after you receive notification of an adverse benefit determination. Requests received after 180 days will not be

rule or protocol used to make the decision will be provided free of charge if requested.

• The denial notice will refer you to the part of the Plan on which the denial is based.

• The denial notice will describe any additional information that is necessary for your claim to be complete. It will explain why such information is necessary.

• The denial notice will tell you the steps to take if you want to appeal the denial and the applicable time limits. The denial notice also will include a statement of your right to sue under Section 502(a) of the Employee Retirement Income Securities Act (ERISA) if the Claims Administrator reviews your appeal of denied benefits and again denies your claim.

• The denial notice will tell you if the denial is based on a determination that the treatment is not medically necessary, is experimental or falls under a similar exclusion or limitation. The denial notice will either explain the scientific or clinical reasons for the denial, applying the terms of the Plan to your circumstances, or it will state that an explanation will be provided free of charge if requested.

• The denial notice will describe the appeal process for Urgent Care Pre-service Claims. If your Urgent Care Pre-service Claim is denied, the Claims Administrator may notify you of the above information verbally, as long as you are given written notification no more than 3 days later.

considered. All requests should be made in writing to the Claims Administrator; provided, however, that requests regarding Urgent Care Claims may be made orally to the Claims Administrator. Plan Reviews of Pre-service Claims are decided by the Plan's Appeals Committee. Plan Reviews of Post-service Claims are decided by the Medical Director (or, his designee).

If a Plan Review is requested, the claimant shall have the following rights:

- to submit written comments, documents, records and other information relating to the Claim for benefits and for the Plan Review to take into account all submitted materials regardless of whether such materials have already been submitted or considered during the initial benefit determination
- upon request and free of charge, access to and copies of all documents, records and other information relevant to the Claim for benefits
- for a Plan Review that does not take into account the initial adverse benefit determination, and that is conducted by an appropriate named fiduciary who is neither the individual who made the initial benefit determination nor the subordinate of such individual
- if the Claim is based in whole or in part on a medical judgment, including determinations with regard to whether a particular treatment, drug or other item is experimental, investigational or not medically necessary or appropriate, a health care professional who has the appropriate training and experience in the field of medicine will be consulted (and that the consulted health care professional will not be an individual who was consulted during the initial benefit determination nor a subordinate of such individual)
- to obtain the identification of the

Appealing Plan Decisions

If you have a question about benefits, you may contact the Customer Service Center at the number listed on the back of your insurance card. Most questions can be taken care of by Customer Service and do not require a formal appeal.

If you (or your health care provider) disagree with a benefit decision made by the Plan about coverage or pre-authorization, you may request a formal "Plan Review." You need to request a Plan Review within 180 days after you receive notice that the Plan has made a benefit decision against you. Requests for Plan Review that are received after 180 days will not be considered. All requests should be made in writing to the Claims Administrator, except Urgent Care Claim requests. Urgent Care Claim requests may be made verbally to the Claims Administrator. Plan Reviews of Pre-service Claims are decided by the Plan's Appeals Committee. Plan Reviews of Post-service Claims are decided by the Medical Director or his designee.

If you request a Plan Review, you have the rights described below.

- You have the right to submit written comments, documents and other information relating to your claim. The Plan Review must take into account all submitted materials, even if the materials have already been submitted or considered during the initial benefit decision.
- You have access to and can get copies of all documents and other information regarding your claim free of charge if requested.
- The Plan Review must not take into account the initial benefit decision. The Plan Review must be conducted by an appropriate named fiduciary who cannot be the individual who made the initial

medical or vocational experts whose advice was obtained on behalf of the Plan in connection with a claimant's adverse benefit determination, without regard to whether the advice was relied upon in making the benefit determination. The determination regarding the appeal of a non-urgent care Pre-service Claim or a Post-service Claim shall be communicated to the claimant (and/or relevant Providers, if applicable) within a reasonable period of time appropriate to the medical circumstances, but not later than 30 days after the appeal was received. The determination regarding the appeal of a Urgent Care Pre-service Claim shall be communicated to the claimant (and/or relevant Providers, if applicable) as soon as possible, taking into account the medical necessity, but not later than 72 hours after the appeal was received. In regard to Post-service Claims only, if a claimant disagrees with the Plan Review determination made by the Medical Director he may appeal that decision to the Plan's Appeals Committee within 180 days after receipt of the denial. Requests received after 180 days will not be considered. All requests should be in writing to the Claims Administrator, who will deliver the claimant's request to the Plan's Appeals Committee. While a Claim is on appeal to the Plan's Appeals Committee, a claimant is entitled to the same rights as during the first appeal. This includes the right to have a person who was not the person who reviewed (or who was a subordinate of the person who reviewed) the initial Claim or the first appeal make a determination on the claimant's latest appeal, and to a review by the Plan's Appeals Committee that provides no deference to any earlier determinations. Additionally, if a claimant's request involves a medical judgment, health care professionals who were not previously consulted and who are not the subordinates of any previously consulted health care professional will be consulted by	benefit decision or that person's assistant. • If the claim is based on a medical judgment that the treatment was experimental, investigational or not medically necessary or appropriate, a health care professional who has the appropriate training must be consulted. The health care professional that is consulted cannot be an individual who was consulted during the initial benefit decision or that person's assistant. • You have the right to obtain the names of the medical or vocational experts whose advice was obtained by the Plan in connection with your benefit decision. You have this right whether or not the advice was actually used in making the decision. You (and/or the relevant health care providers) will be notified of the Plan's decision regarding the appeal of a Non-urgent Care Pre-service Claim or a Post-service Claim within a reasonable period of time. A "reasonable period" depends on the medical circumstances, but is no later than 30 days after the appeal was received. You (and/or the relevant health care providers) will be notified of the Plan's decision regarding the appeal of an Urgent Care Pre-service Claim as soon as possible. The amount of time depends on the medical necessity of the services, but will be no later than 72 hours after the appeal was received. In regard to Post-service Claims only, if you disagree with the Plan Review decision made by the Medical Director, you may appeal that decision to the Plan's Appeals Committee within 180 days after you receive notice that your request has been denied. Requests received after 180 days will not be considered. All requests should be made in writing to the Claims Administrator. The Claims Administrator will deliver your request to the Plan's

the Plan's Appeals Committee. The Plan's Appeals Committee's determination shall be communicated to the claimant within a reasonable period of time not to exceed 30 days after the appeal was received. If your Claim is denied, the denial notice will provide: • the specific reason(s) for the denial, and, if applicable, either the specific internal rule, guideline, protocol or other similar criterion (if any) relied upon in making the denial, or a statement that the rule, guideline, protocol or other similar criterion that was relied upon in making the denial and that a copy of such rule, guideline, protocol or other similar criterion will be provided free of charge upon request • references to the part of the Plan on which the denial is based • a statement that you are entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to your Claim for benefits; • a statement of your right to bring an action under Section 502(a) of ERISA after the exhaustion of the Plan's appeal procedures • if the denial is based on a medical necessity or experimental treatment or similar exclusion or limit, an explanation of the scientific or clinical judgment for such denial that applies the terms of the Plan to your medical circumstances, or a statement that such explanation will be provided free of charge upon request • for the initial appeal of Post-service Claims only, appropriate information as to the steps to be taken if you desire to appeal the Plan Review's determination to the Plan's Appeals Committee, including notice of applicable time limits.	Appeals Committee. While your claim is on appeal to the Plan's Appeals Committee, you have the same rights you had during the first appeal. • This includes the right to have a person, other than the person (or that person's assistant) who reviewed the initial claim or the first appeal, make a determination on your latest appeal. • You have a right to a review by the Plan's Appeals Committee that does not defer to any earlier determinations. • If your request involves a medical judgment, the Plan's Appeals Committee will consult health care professionals who were not previously consulted. You will be notified of the Plan's Appeals Committee's decision within a reasonable period of time, but no later than 30 days after the appeal was received. If your claim is denied, the denial notice will provide you with the information described below. • The denial notice will inform you of the specific reasons for the denial. If applicable, the denial notice will either include the rule or protocol on which the denial is based, or it will state that the rule or protocol used to make the decision will be provided free of charge if requested. • The denial notice will refer you to the part of the Plan on which the denial is based. • The denial notice will state that you have the right to reasonable access to and copies of all documents and other information regarding your claim free of charge if requested. • The denial notice will include a statement of your right to sue under Section 502(a) of ERISA after you have

The Claims Administrator, the Medical Director, the Plan's Appeals Committee, and/or their respective delegates shall have absolute discretion in determining Claims for benefits under the Plan.	done everything you can under the Plan's appeal procedures. • The denial notice will tell you if the denial is based on a determination that the treatment is not medically necessary, is experimental or falls under a similar exclusion or limitation. The denial notice will either explain the scientific or clinical reasons for the denial, applying the terms of the Plan to your medical circumstances, or it will state that an explanation will be provided free of charge if requested. • For initial appeals of Post-service Claims only, the denial notice will tell you the steps to take if you want to appeal the Plan Review's decision to the Plan's Appeals Committee and the applicable time limits. The Claims Administrator, the Medical Director, the Plan's Appeals Committee, and/or their agents shall have absolute discretion in determining claims for benefits under the Plan.

Claims Procedure Clause, Plan 2

Original	Redrafted
CLAIMS PROCEDURE The following are the claims procedures for the Plans. Absent a showing of irreparable harm, you cannot bring a court action for benefits under the plans until the claim review process described below, including all appeals, has been completed. **Claims Procedures for Medical, Dental and Vision Plans** If you believe that you are entitled to benefits under the Medical, Dental or Vision Plans, then you should submit your claim in writing to the Claims Administrator for the appropriate Plan, as identified on the page with the heading "Claims Administrators". For purposes of these claims procedures, the following definitions will apply: • A "post-service claim" is any claim for a benefit that is not a pre-service claim. • A "pre-service claim" is a claim for a benefit with respect to which the terms of the Plan condition receipt of the benefit, in whole or in part, on approval of the benefit in advance of obtaining medical care. • An "urgent care claim" is a claim which, unless the special urgent care deadlines are followed either (1) could seriously jeopardize the patient's health or ability to regain maximum function, or (2) in the opinion of a physician with knowledge of the patient's medical condition, would subject the patient to severe pain that cannot be adequately managed without the care or treatment requested in the claim. An individual acting on behalf of the plan, applying the judgment of a prudent layperson, can determine whether the claim is an urgent	**CLAIMS PROCEDURE** The following sections describe how to file a claim so that the Plan covers, or pays for, the care you receive. If your claim is denied, the sections below will tell you how to appeal the denial. Unless you can show that you will suffer irreparable harm, you cannot file a lawsuit against the Plan for benefits until you have completed all the appeal procedures described below. **Claims Procedures** If you think that you are entitled to benefits under the Plan, then you should submit your claim in writing to the Claims Administrator. The following definitions apply to claims procedures. • A "pre-service claim" is a claim for a benefit that is filed *before* you receive the benefit. The Plan will not pay for the benefit unless the Plan has approved the benefit before you receive it. • A "post-service claim" is a claim for a benefit that is filed *after* you have received the benefit. • An "urgent care claim" is a claim which asks the Plan to treat the claim as an emergency. There are two situations in which a person should file an urgent care claim. First, if the claim is not processed more quickly than other types of claims, the patient's health or ability to make a full recovery could be seriously endangered. Second, a doctor believes that if the claim is not processed more quickly than other types of claims, the patient would be subjected to severe pain that cannot be managed without the requested services. An individual who

care claim. However, if a physician with knowledge of the patient's medical condition determines that the claim involves urgent care, it must be considered an urgent care claim.

For urgent care claims and pre-service claims, the appropriate Claims Administrator will provide written or electronic notice to you of its benefit determination (whether adverse or not) within the following time frames:

- 72 hours after receipt of an urgent care claim (a decision can be provided to you verbally, as long as written or electronic notification is provided to you within three days after the verbal notification)
- 15 days after receipt of a pre-service claim.

For post-service claims, the Claims Administrator will provide you with written or electronic notice of any denial of your claim within 30 days after receipt of the claim. Regardless of the type of claim, you will receive written or electronic notification of any claim denial that includes:

- The specific reason(s) for the denial.
- References to the pertinent Plan provisions on which the decision is based.
- A description of any additional material or information needed to support your claim and an explanation of why such material or information is necessary.
- A description of the Plan's claim review procedure and the time limits applicable to such procedure (including information about your right to bring a civil action under section 502(a) of ERISA following an adverse benefit determination review).
- Reference to any internal rule, guideline or protocol relied upon in making the decision.
- If the claim denial is based on a

makes decisions on behalf of the Plan can determine whether the claim is an urgent care claim by determining what a reasonable person would decide. However, if a doctor with knowledge of the patient's medical condition decides the patient needs urgent care, the Plan must treat the claim as an urgent care claim.

Initial Claims Decisions

For urgent care claims and pre-service claims, a Claims Administrator will provide you with written or electronic (i.e., through e-mail) notice of its benefit decision within the time frames described below.

- If you file an urgent care claim, the Claims Administrator can notify you verbally of the Plan’s decision within 72 hours after the claim was received, as long as you receive written or electronic notification no more than three days later.
- If you file a pre-service claim, the Claims Administrator will notify you of the Plan’s decision within 15 days after the claim was received.

For post-service claims, a Claims Administrator will provide you with written or electronic notice of any denial of your claim within 30 days after the claim was received.

For all types of claims, you will receive written or electronic notification of any claim denial. The claim denial letter will:

- inform you of the specific reasons for the denial;
- refer you to the specific Plan sections on which the denial is based;
- describe any additional information that is needed to support your claim and will explain why the information is needed;
- describe the Plan's claim review procedure and the applicable time limits.

medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the adverse determination, applying the terms of the plan to your medical circumstances, or a statement that such explanation will be provided free of charge upon request.

• If the claim denial concerns an urgent care claim, a description of the expedited review process applicable to the claim.

For urgent care and pre-service claims, if you fail to provide the Claims Administrator with sufficient information to determine whether, or to what extent, benefits are covered or payable under the plan, or if you fail to follow the Plan's procedures for filing such claims, the Claims Administrator must notify you within 24 hours of receiving your urgent care claim or within 5 days of receiving your pre-service claim of the specific information needed to complete the claim. Notification may be verbal, unless you request written notification. In the case of an urgent care claim, you then have 48 hours to provide the information needed to process the claim. You will be notified of a determination on your urgent care claim no later than 48 hours after the earlier of:

• The Claims Administrator's receipt of the requested information; or

• The end of the 48-hour period within which you were to provide the additional information.

For pre- and post-service claims, a I5-day extension of the time period for deciding claims may be allowed, provided that the Claims Administrator determines that the extension is necessary due to matters beyond its control. If such an extension is necessary, the Claims Administrator must notify you before the end of the 15- or 30-day period of the reason(s) requiring the extension and the date it expects to provide a decision on your claim. If such an extension is necessary due

• include information about your right to sue under Section 502(a) of the Employee Retirement Income Securities Act (ERISA) if the Claims Administrator reviews your appeal of denied benefits and again denies your claim;

• refer you to any internal rule or protocol used in making the decision; and

• describe the fastest appeal process available if the claim denial is for an urgent care claim.

In some cases the denial is based on a determination that the treatment is not medically necessary, is experimental or falls under a similar exclusion or limitation. In such cases, the denial letter will either explain the scientific or clinical reasons for the denial, applying the terms of the Plan to your circumstances, or it will state that an explanation will be provided free of charge if requested.

For urgent care and pre-service claims, if you do not give the Claims Administrator enough information to determine which of the services you received are covered by the Plan or if you do not correctly follow the Plan’s procedures for filing such claims, the Claims Administrator must tell you what information is needed to complete your claim. The Claims Administrator must notify you within 24 hours after receiving an urgent care claim or within 5 days after receiving a pre-service claim. The Claims Administrator may only notify you verbally, unless you request written notification. In the case of an urgent care claim, you then have 48 hours to provide the information needed to process the claim. If you provide the requested information, you will be notified of the Claims Administrator’s decision about your urgent care claim within 48 hours after the Claims Administrator received the requested information. If you do not provide the requested information in time, you will

to your failure to submit the information necessary to decide the claim, the notice of extension must also specifically describe the required information. You then have 45 days to provide the information needed to process your claim. For pre-service claims, the Claims Administrator must notify you regardless of whether the claim is denied or approved. For post-service claims, the Claims Administrator must notify you only if the claim is denied. If you do not provide the required information within the 45-day period, your claim may be denied. If an extension is necessary for pre- and post-service claims due to your failure to submit necessary information, the Plan's time frame for making a benefit determination is stopped from the date the Claims Administrator sends you an extension notification until the date you respond to the request for additional information. If your claim is denied, you or your representative may appeal the decision. Your written request for review or reconsideration must be made in writing to the address indicated in the claim denial letter within 180 days after you receive notice of a claim denial. As part of your appeal, you have the right to: • Submit written comments, documents, records and other information relating to your claim for benefits that you wish to have considered. • Request, free of charge, reasonable access to, and copies of, all documents, records and other information relevant to your claim for benefits. • A review that takes into account all comments, documents, records and other information submitted by you related to the claim, regardless of whether the information was submitted or considered in the initial benefit determination. • A review that does not defer to the initial claim determination and that is	be notified of the Claims Administrator's decision within 48 hours after the 48-hour period you had to provide the requested information. For pre- and post-service claims, the Claims Administrator may determine that a 15-day extension of the time period for deciding claims is necessary due to matters beyond the Claims Administrator's control. If an extension is needed, the Claims Administrator must notify you before the end of the 15- or 30-day period. The notice will inform you of the reasons for the extension and the date the Claims Administrator expects to provide a decision about your claim. If the Claims Administrator needs more information from you in order to make a decision, the notice of extension must also specifically describe the required information. After the Claims Administrator tells you what information is missing, you have 45 days to provide the requested information. For pre-service claims, the Claims Administrator must notify you regardless of whether the claim is denied or approved. For post-service claims, the Claims Administrator must notify you only if the claim is denied. If you do not provide the required information within the 45-day period, your claim may be denied. If an extension is needed for pre- and post-service claims because you did not submit all the necessary information, the Plan's time frame for making a benefit decision is stopped from the date the Claims Administrator sends you an extension notification until the date you respond to the request for additional information. If your claim is denied, you may appeal the decision. Your written request for reconsideration must be made in writing to the address in the claim denial letter within 180 days after you receive notice of the claim denial.

conducted by someone other than the individual who made the adverse determination, and who is not such person's subordinate.

• In cases where the claim denial was based in whole or in part on medical judgment, require the individual reviewing the appeal to consult with a health care professional who has appropriate training and experience in the field of medicine involved in the medical judgment, who was not consulted in connection with the initial claim determination, and who is not such person's subordinate.

• The identification of medical or vocational experts whose advice was obtained in connection with benefit determination, regardless of whether the advice was relied upon in making the decision.

• In the case of a claim for urgent care, an expedited review process in which you may submit a request (verbally or in writing) for an expedited appeal of a denied urgent care claim and where all necessary information, including the plan's benefit determination on review, will be transmitted between the Plan and you by telephone, facsimile or other available similarly prompt method.

Ordinarily, a decision on an appeal will be reached within:

• 72 hours after receipt of your appeal of an urgent care claim

• 30 days after receipt of your appeal of a pre-service claim

• 60 days after receipt of your appeal of a post-service claim

You will be provided with written or electronic notification if your appeal is denied. Such notification will include:

• The specific reason(s) for the denial.

Appealing Claims Decisions

If you request that the Plan review its decision, you have the rights described below.

• You have the right to submit written comments, documents and other information relating to your claim that you wish the Plan to consider.

• You have the right to reasonable access to copies of all documents and other information regarding your claim free of charge if requested.

• The Plan’s review must take into account all the materials relating to your claim that you submitted, even if the materials have already been submitted or considered during the initial benefit decision.

• The Plan’s review must not defer to the initial benefit decision. The Plan’s review must be conducted by someone other than the individual who made the initial benefit decision or that person’s assistant.

• If the claim is based on a medical judgment, the individual reviewing the appeal must consult a health care professional who has the appropriate training in the field of medicine involved. The health care professional that is consulted cannot be an individual who was consulted during the initial benefit decision or that person’s assistant.

• You have the right to the identification of the medical or vocational experts whose advice was obtained by the Plan in connection with your benefit decision. You have this right whether or not the advice was actually used in making the decision.

• In the case of an urgent care claim, you have the right to a faster review process.

• References to the pertinent Plan provisions on which the denial is based.

• Reference to any internal rule, guideline or protocol relied upon in making the decision.

• If the claim denial is based on a medical necessity or experimental treatment or similar exclusion or limit, either an explanation of the scientific or clinical judgment for the adverse determination, applying the terms of the Plan to your medical circumstances, or a statement that such explanation will be provided free of charge upon request.

• Information concerning your right to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to your claim.

• Information concerning your right to bring a civil action for benefits under section 502(a) of ERISA with respect to your claim.

Claims Procedures Regarding Coverage Eligibility

If you are told that you are not eligible for coverage under any of the welfare plans or programs listed above, but you believe that you should be eligible, then you should request an eligibility claim initiation form from the Benefits Service Center. The claim must be submitted in writing to the address shown on the claim initiation form.

Concurrent Care Claims

If the plan has approved an ongoing course of treatment to be provided over a period of time or a number of treatments, any reduction or termination by the Plan of such course of treatment (other than by the Plan amendment or termination) before the end of

You may submit a verbal or written request for a faster appeal of a denied urgent care claim. In this case, all necessary information will be communicated between you and the Plan by telephone, fax machine or another fast method. This includes information regarding the benefit decision under review.

Ordinarily, a decision on an appeal will be reached within:

• 72 hours after receipt of your appeal of an urgent care claim

• 30 days after receipt of your appeal of a pre-service claim

• 60 days after receipt of your appeal of a post-service claim

If your appeal is denied, you will receive written or electronic notification. The appeal denial letter will:

• inform you of the specific reasons for the denial;

• refer you to the specific Plan sections on which the denial is based;

• refer you to any internal rule or protocol used in making the decision;

• state that you have the right to reasonable access to and copies of all documents and other information regarding your claim free of charge if requested; and

• include information concerning your right to sue under Section 502(a) of ERISA with respect to your claim.

In some cases, the denial is based on a determination that the treatment is not medically necessary, is experimental or falls under a similar exclusion or limitation. In such cases, the appeal denial letter will either explain the scientific or clinical reasons for the denial, applying the terms of the Plan to your circumstances, or it will state that an

such period of time or number of treatments shall be treated as a claim denial. The Claims Administrator shall notify you of the claim denial sufficiently in advance of the reduction or termination to allow you to appeal the denial and obtain a determination on review of that denial before the benefit is reduced or terminated. Any request by you to extend the course of treatment beyond the period of time or number of treatments previously approved that is an urgent care claim shall be decided as soon as possible, but not later than 24 hours after receipt of the claim by the Claims Administrator, provided that such claim is made at least 24 hours prior to the expiration of the prescribed period of time or number of treatments.

This provision only applies to a failure that (1) is a communication by you or an authorized representative that is received by a person or organizational unit customarily responsible for handling benefit matters, and (2) is a communication that names you, a specific medical condition or symptom, and a specific treatment, service or product for which approval is requested.

explanation will be provided free of charge if requested.

Requests for More Treatment

If you have already received approval to receive a certain number of treatments or to receive treatment for a certain length of time, any reduction in your treatment (other than by Plan amendment or termination) is considered a claim denial. The Claims Administrator will notify you of the claim denial in time for you to appeal the decision and hear back before the reduction takes place. For an urgent care claim, if you request more treatment than the amount of treatment already approved, your claim will be decided as soon as possible. The decision will be made no later than 24 hours after the claim was received, as long as you made the claim at least 24 hours before the approved treatment expired.

This only applies if (1) the person or division customarily responsible for handling benefit matters receives a communication from you or your agent, and (2) the communication names you, your specific medical condition, and the specific service or product you want approved.

Claims Procedures for Plan Eligibility

If you are told that you are not eligible to participate in the Plan, but you believe that you are eligible, you should request an “Eligibility Claim Initiation Form” from the Benefits Service Center. The claim must be submitted in writing to the address shown on the claim initiation form.

Appendix C: Comprehension Test

The following questions concern the Health Plan you just read. Please select the **best** answer from the available choices.

Medical Necessity Clause, Declarative Questions

Will the Health Plan cover benefits it does not consider medically necessary?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Do benefits for Temporomandibular Joint Disorder (TMJ) have to be medically necessary to be covered?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If two different treatments are expected to have the same outcome, will the treatment that is more convenient to the patient be provided?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Is a treatment that will positively impact a patient's medical condition considered medically necessary?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If the same care cannot be provided as safely in an outpatient setting as in an inpatient setting, is the inpatient care considered medically necessary?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Is treatment that is ordered and approved by a licensed physician covered by the Health Plan?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Does the physician treating the patient have a say in what treatment is considered medically necessary?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Medical Necessity Clause, Procedural Questions

A patient complains to her doctor that she has a headache. The doctor orders a battery of tests. Is the Health Plan likely to cover the scan?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

An expectant mother needs a cesarean section (C-section). Can the Health Plan determine a 96-hour hospital stay is not medically necessary and therefore is not covered?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If a doctor botches a patient's nose job, can the patient's treatment to fix her nose be covered by the Health Plan?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If a patient's doctor believes a kidney transplant is medically necessary to address his kidney failure, will the Health Plan cover the treatment?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If a patient has a terminal cancer and has exhausted all the traditional treatments that are available, will the Health Plan cover an experimental treatment?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A young child is hit by a car and taken to the emergency room. Will the hospital care be covered if the same care could have been provided in a pediatrician's office?

A. Yes
B. **No**
C. I did not understand the Health Plan material regarding this question

Bypass surgery is a standard treatment for clogged arteries. If a patient has clogged arteries, can the Health Plan refuse to cover bypass surgery?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Claims Procedure Clause, Declarative Questions

Is a pre-service claim filed after the Health Plan has denied coverage but before treatment has been received?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

When reviewing a benefit denial, can the Health Plan take the initial decision to deny coverage into account?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Is an urgent care claim only appropriate when the patient's health could be seriously endangered unless treated quickly?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Does Section 502(a) of ERISA give you a right to sue the Health Plan for denied coverage?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If the Health Plan denies coverage for a requested treatment based on a determination that the treatment is not medically necessary, does the Health Plan choose which medical professionals review the Plan's decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Can the individual who reviews a denial of coverage be the same individual who made the initial benefit decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Do patients have the right to know who gave professional advice to the Plan in regard to their claim?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If a patient does not include all the necessary information in his/her claim, will the Health Plan first deny the claim and then give the patient a chance to reverse this decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

If a patient does not include all the necessary information for a post-service claim, can the Health Plan wait 45 days to notify the patient of its decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Claims Procedure Clause, Procedural Questions

A patient files a post-service claim for X-rays. The post-service claim is denied. If the patient decides to appeal the denial, can she submit a note from the doctor who treated her that says the doctor thought the care was medically necessary?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A patient finds a suspicious mole on his arm that he has the doctor check. The doctor tells him that the mole is dangerous and should be removed. He files a claim with the Health Plan for coverage but his claim is denied. He wants to sue the Health Plan for coverage. Should his first step be filing a request with the Health Plan to review its decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A Plan member's son needs surgery. The Plan member files an urgent care claim. The Claims Administrator calls the Plan member later that same day and tells her that she forgot to include her son's social security number in the paperwork, which is necessary for the claim to be approved. Does the Plan member have to provide the requested information within 48 hours for the Health Plan to make a decision?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A patient requests that the Health Plan review its decision to deny coverage for back surgery. In the claim denial letter, the Plan states that the coverage was denied based on a lack of medical necessity. Can the Plan member get more specific information about the reason for the denial?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

While exercising two months ago, a patient damaged some tendons in his ankle. He filed a pre-service claim for physical therapy treatment and was approved to attend 24 physical therapy sessions to treat the injury. He has already attended 12 sessions and his ankle is starting to feel better. He receives notification that the Health Plan has decided to reduce his approved treatment to 15 sessions. Is he most likely to get coverage for all 24 sessions if he keeps going to the remaining 12 sessions he was originally approved for and then files a post-service claim?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

The Health Plan denies coverage for a Plan member's knee surgery. The Plan member is not satisfied with the Health Plan's decision. Does the Plan member have to appeal the decision to the Health Plan before filing a lawsuit against the Health Plan?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A patient needs a kidney transplant. The transplant was scheduled for 3 days from now, but the date has been set back to 10 days from now. The patient needs kidney dialysis in the meantime to stay alive. The patient has been approved under an urgent care claim to receive dialysis for 3 days. Now, the patient needs dialysis for 7 additional days so she files an urgent care claim request for more treatment. If the patient calls the Claims Administrator, does the Claims Administrator have to notify her of the Health Plan's decision immediately?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A patient needs a skin graft. Can the Claims Administrator extend the deadline for making a claims decision if the patient did not provide her doctor's name on the pre-service claim form?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

A patient snores loudly at night. His doctor tells him a tonsillectomy will reduce his snoring. He files a pre-service claim for treatment and is denied. He calls the Claims Administrator, requesting an appeal of the decision. If he tells the Claims Administrator all the information the Health Plan needs to process his appeal, has he followed the proper appeal procedure?

A. Yes
B. No
C. I did not understand the Health Plan material regarding this question

Appendix D: Short Test of Functional Health Literacy in Adults

Here are some medical instructions that you or anybody might see around a hospital. These instructions are in sentences and have some of the words missing. Where a word is missing, a blank line is drawn, and 4 possible words that could go in the blank appear just below it. I want you to figure out which of those 4 words should go in the blank, which word makes the sentence make sense. When you think you know which one it is, pick that choice and go on to the next blank.

PASSAGE A: X-RAY PREPARATION

Your doctor has sent you to have a _____ X-ray.

stomach
diabetes
stitches
germs

You must have an _____ stomach when you come for _____.

asthma	is.
empty	am.
incest	if.
anemia	**it.**

The X-ray will _____ from 1 to 3 _____ to do.

take	beds
view	brains
talk	**hours**
look	diets

THE DAY BEFORE THE X-RAY.

For supper have only a _____ snack of fruit, _____ and jelly, with coffee or tea.

little	toes
broth	throat
attack	**toast**
nausea	thigh

After _____, you must not _____ or drink anything at

minute,	easy
midnight,	ate
during,	drank
before,	**eat**

_____ until <u>after</u> you have _____ the X-ray.

ill	are
all	has
each	**had**
any	was

THE DAY OF THE X-RAY.

Do not eat _____.

- appointment
- walk-in
- **breakfast**
- clinic

Do not _____, even _____.

drive,	heart.
drink,	breath.
dress,	**water.**
dose,	cancer.

If you have any _____, call the X-ray _____ at 616-4500.

answers,	**Department**
exercises,	Sprain
tracts,	Pharmacy
questions,	Toothache

PASSAGE B: MEDICAID RIGHTS AND RESPONSIBILITIES

I agree to give correct information to _____ if I can receive Medicaid.

hair
salt
see
ache

I _____ to provide the county information to _____ any

agree	hide
probe	risk
send	discharge
gain	**prove**

statements given in this _____ and hereby give permission to the

emphysema
application
gallbladder
relationship

_____ to get such proof. I _____ that for Medicaid I must report

inflammation	investigate
religion	entertain
iron	**understand**
county	establish

any _____ in my circumstances within _____ (10) days of

changes	three
hormones	one
antacids	five
charges	**ten**

becoming _____ of the change. I understand _____ if I DO NOT

award	thus
aware	this
away	**that**
await	than

like the _____ made on my case, I have the _____ to a fair

marital	bright
occupation	left
adult	wrong
decision	**right**

hearing. I can _____ a hearing by writing or _____ the county

request	counting
refuse	reading
fail	**calling**
mend	smelling

where I applied. If you _____ TANF for any family _____, you

wash	**member,**
want	history,
cover	weight,
tape	seatbelt,

will have to _____ a different application form. _____, we will

relax	Since,
break	Whether,
inhale	**However,**
sign	Because,

use the _____ on this form to determine your _____.

lung	hypoglycemia.
date	**eligibility.**
meal	osteoporosis.
pelvic	schizophrenia.

Appendix E: Benefit Denial Letters

Now imagine that you are a member of the Health Plan you read. You have been seeing your doctor about varicose veins that you have in your legs. Varicose veins are enlarged veins commonly found close to the skin's surface. You and your doctor think you should have the veins removed because they have made walking and exercise painful (strong claim)/they are visibly unattractive and occasionally painful (weak claim). You filed a pre-service claim. The following letter is the Health Plan's response to your request.

First Benefit Denial Letter

Dear Plan Member:

Your request for coverage for the surgical removal of varicose veins that have made walking and exercise painful (strong claim)/that are visibly unattractive and occasionally painful (weak claim) has been reviewed by our Claim Administrator and denied by the Health Plan for the following reason: *Request for surgery has been denied due to lack of medical necessity for the procedure requested.*

You have the right to appeal our decision. The appeal must be in writing and it should include the complete medical record and identify issues you wish us to consider.

We have advised your doctor that financial liability for the above service is currently entirely your responsibility.

If you have questions regarding the appeal procedure, please contact the Claims Department.

Sincerely,
Diane Smith, R.N.
Claims Administrator

The following letter is the Health Plan's response to your appeal.

Second Benefit Denial Letter

Dear Plan Member:

You have requested that the Health Plan reconsider its denial of your request for pre-certification for the surgical removal of varicose veins that have made walking and exercise painful (strong claim)/that are visibly unattractive and occasionally painful (weak claim). The Health Plan affirms its decision to deny coverage for the treatment proposed.

In investigating your request, the Health Plan has (1) conducted a search of Medline (an online database of journal articles about medicine), (2) reviewed the medical literature, and (3) obtained opinions from two local board certified surgeons, Dr. William Tanner and Dr. Carrie Johnson.

After obtaining this information, the Health Plan denies your claim for the following reason: *Request for surgery has been denied due to lack of medical necessity for the procedure requested.*

You have the right to challenge the Health Plan’s decision through a lawsuit, under Section 502(a) of ERISA.

Sincerely,
Dan Munroe, M.D.
Medical Director

Appendix F: Procedural Fairness and Plan Satisfaction Questions

Procedural Fairness

Based on how you feel at this point in the claims process, rate your agreement with the following statements regarding the Health Plan you read about.

Control

Health Plan members get the information and education they need to participate effectively in their care and treatment.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan has procedures that give members the chance to have their say regarding the Health Plan.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan makes sure that members' concerns are heard before claims decisions are made.

1	2	3	4	5
Strongly Disagree				Strongly Agree

Neutrality

The procedures followed in the claims process favor members over the Health Plan.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The procedures followed by the Health Plan in the claims process ensure that everyone is treated fairly.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan collects accurate and complete information in order to make claims decisions.

1	2	3	4	5
Strongly Disagree				Strongly Agree

Trust

The claims procedures used by the Health Plan protect members from unfair treatment.

1	2	3	4	5
Strongly Disagree				Strongly Agree

Overall, the Health Plan tries to handle members' situations fairly.

1	2	3	4	5
Strongly Disagree				Strongly Agree

Social Standing

The Health Plan is respectful of its members.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan is caring to its members.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan values what is best for each member.

1	2	3	4	5
Strongly Disagree				Strongly Agree

Plan Satisfaction

The procedures used to handle this claim were fair.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan provides adequate coverage to Plan members.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan gives too high a priority to holding down the cost of medical care instead of providing the best medical care.

1	2	3	4	5
Strongly Disagree				Strongly Agree

The Health Plan takes appeals seriously.

1	2	3	4	5
Strongly Disagree				Strongly Agree

If I were a member of this Health Plan, I would be satisfied with it.

1	2	3	4	5
Strongly Disagree				Strongly Agree