

Field Medical Underwriting Manual

TENTATIVE UNDERWRITING ACTIONS

Frequently, agents ask if an underwriting action can be projected for a specific health condition. We are pleased to provide this guide which contains underwriting assistance for many of the most frequently encountered health histories and conditions.

The difficulty in projecting a tentative underwriting action lies in the fact that each applicant with a specific condition brings her/his own subtle variables to that condition. These unique variables frequently change the underwriting “book” action. This works in both directions. Some applicants with a particular condition will merit a more favorable decision than that expressed in this guide. Others, with what appears to be the very same condition, could be judged less favorably. Please bear in mind these are only tentative projections for individual impairments.

Fragmentary or incomplete information (symptoms without a diagnosis, diagnosis without objective quantification, test results without the reasons for the test) leads to a “speculative guess”. Full information usually produces a more fair and accurate assessment.

These guidelines are designed to assist you in your role as a field underwriter. We hope they enable you to ask better questions and gather more complete information which, in turn, should expedite the underwriting process.

For the purpose of this manual, we will assume that:

- **Standard** does not necessarily preclude Preferred
- A **low rating** means Table B to C (2 –3 tables)
- A **medium rating** means table C to F (3 – 6 tables)
- A **high rating** means table F to P (6-16 tables).

Your underwriter is available to discuss any situation with you. If there is a question regarding the underwriting decision on your applicant, we encourage you to contact the underwriter.

Please call one of the underwriters for any information on a topic not covered.

We hope this will be a valuable resource for you.

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Impairments (*In alphabetical order*)

Acromegaly (Giantism) is due to excess growth hormone (GH) in adults, usually because of a growth hormone secreting pituitary adenoma, causing enlargement of the hands and feet, coarse facial features, glucose intolerance (“prediabetes”), and hypertension. Because a liver protein mediates the effects of growth hormone called insulin-like growth factor I (IGF-I), measurements of IGF-1 are often used to make the diagnosis and follow the effects of therapy. Alternatively, GH measurements taken during an oral glucose tolerance test may be used. Excess mortality is due to an increased incidence of cardiovascular damage (high blood pressure, coronary artery disease, and diseased heart muscle (cardiomyopathy), respiratory complications, and colon carcinoma. Treatment is usually with surgery first followed by radiation therapy and/or medical therapies such as octreotide or bromocriptine, if surgery alone is not curative. Treatment with surgery or radiation may cause loss of pituitary function (hypopituitarism), which must be monitored regularly.

Questions:

- Date of diagnosis and last treatment?
- When did the applicant last see his/her physician for this condition?
- What tests related to this condition have been done? (Some might include MRI of the head, growth hormone levels blood test, cardiac testing)
- How was it treated originally? Subsequently?
- Concurrent problems – which are present? (Some might include diabetes, heart disease, high body fats, and sleep apnea)

Rating (well controlled following medical or surgical treatment)

0 – 1 year since treatment probable postponement

1 – 2 years since treatment low rating

Greater than 2 years since treatment - Possible std

AIDS/HIV

Description: The following individuals would be considered in this group:

- those with AIDS,
- those who are HIV positive

Rating: Uninsurable if the HIV test is positive.

Alcoholism

Description: The incidence of alcoholism in males is approximately 10% and in females, it is about 4%. These numbers, combined with an associated high mortality rate especially in the younger aged population, make alcoholism one of the most important areas of underwriting.

Alcohol dependence is defined as repeated alcohol-related difficulties in at least three of seven areas of functioning. These include any combination of:

- alcohol tolerance (being able to "hold it well")
- withdrawal symptoms from discontinuing alcohol intake
- drinking larger amounts of alcohol over longer periods than intended
- an inability to control use
- spending a great deal of time associated with alcohol use
- foregoing important activities to drink
- continued use of alcohol despite suffering from physical or psychological problems.

These difficulties are predictive of a course of recurrent problems with the use of alcohol. Life span can be shortened by a decade or more.

Questions (if there is a known history of alcoholism):

- Is the proposed insured in a support group such as AA?
- Does the applicant have depression?
- Is there a history of drug abuse?
- When was the last drink?

Rating: If alcoholism continues being an active problem, the applicant is not likely to be insurable.

Alzheimer's/Dementia Diseases

Description: This is a progressive degenerative process of the brain that causes a decline in cognitive and judgmental abilities. The course of the illness is often rapid.

Questions: How and when was the diagnosis made and by whom? Has there been any neuropsychiatric testing (could be useful if diagnosis is questionable)?

Rating: Uninsurable.

Anorexia Nervosa Eating Disorder

Description: This is an eating disorder resulting in severe weight loss and is potentially fatal. Supportive measures are ongoing.

Questions:

- What are the medicines, treatment dates, hospitalizations related to this condition?
- From your observation, does the applicant look too thin?
- Complete medical/psychiatric records would be necessary to substantiate that the applicant is stable. Who is most likely to have these records?

Rating: Uninsurable until treated and recovered. The recovery needs to be well documented and supported in the medical records. After having recovered for at least six months, and after the weight is normal, a medium rating could be expected for about two years, then a low rating for 2 – 3 more years. If there is a history of relapses and multiple recurrences, we cannot insure the applicant until they have enjoyed several years of recovery.

Anxiety

Description: Symptoms include things such as fear, apprehension, rapid heart rate, chest tightness, and shortness of breath. This disorder is quite common. As a rule, it interferes only minimally with one's day-to-day lifestyle. Anxiety may be a symptom of some other condition such as depression or substance abuse.

Questions:

- What medications is the applicant taking (prescribed and over the counter)?
- How is the condition treated?
- Are there extenuating circumstances?
- Has he/she been hospitalized because of any emotional or chemical dependency problem?
- Is there a history of panic attacks? (see panic section below)
- How does the condition effect lifestyle?
- Is there a history of suicidal thoughts or attempts?

Rating: As a rule, mild anxiety as a lone impairment does not require a rating. A low to medium rating may be applied for more disabling anxiety especially if it is combined with depression or if it is part of a panic disorder.

Arthritis

Description: Degenerative joint disease (DJD), *osteoarthritis*, and "*inflammatory arthritis*" are two general types of arthritis. The latter type of arthritis has many subtypes (i.e. rheumatoid arthritis, systemic lupus erythematosus (SLE), and gout).

Questions:

- What is the type of arthritis (i.e. rheumatoid, osteoarthritis)? (See Rheumatoid Arthritis and Lupus Erythematosus.)
- What medications are taken?
- Has the applicant ever had gastrointestinal bleeding?
- Is the applicant seeing a joint specialist (rheumatologist)?
- What effect does it have on daily activity?
- What activities are limited because of arthritis?

Rating: DJD is generally standard. Many types of the inflammatory arthritis may have a low to medium rating depending upon treatment and complicating medical problems associated with the disease. Long-standing use of oral steroids, such as Prednisone, implies a less favorable form of arthritis. Also, this medicine may cause other medical problems. Thus, the rating may be higher with Prednisone's *chronic* use.

Asthma

Description: This condition causes the airways to become narrowed and blocked with mucous. Exercise and/or cold may trigger a very transitory episode. Allergies may cause persistent disease. There are numerous inhaled and oral medications used to prevent and treat an acute attack.

Questions:

- When was the asthma diagnosed?
- Is there a history of asbestos exposure?
- Does the applicant smoke?
- Does an allergist or pulmonologist (lung specialist) follow the applicant?
- What medicines are taken and how often?
- What activities of daily living must be restricted due to asthma?
- How many times in the past five years has the applicant been hospitalized for asthma?

- How many times in the past five years has he/she been seen in the emergency room for asthma, but not admitted to the hospital?
- When was the last time?
- Does the applicant check his own breathing capacity? If so, please provide results.
- In addition to asthma, does the applicant also have a diagnosis of chronic obstructive pulmonary disease (chronic obstructive lung disease)?

Rating: Those under age 5 may not be insurable unless the symptoms are exceedingly mild. Generally, young adults and adults can be accepted standard for mild asthma. A low to medium rating may be assessed for moderate asthma. "Moderate" is defined as requiring multiple medications for control, including the periodic use of oral steroids (e.g. Prednisone pills). During perhaps a half dozen attacks per year, the "moderate" asthmatic misses school or work and may need occasional visits to the emergency room. Daily symptoms, and/or frequent trips to the hospital, define a severe asthmatic who may be insurable at a high substandard rating or may be uninsurable. Inhaled medicines do not necessarily prohibit a preferred rating. Please call the underwriting department for preferred consideration if it appears that the applicant has only mild asthma.

Atrial Fibrillation

Description: This condition is a type of arrhythmia (abnormal heart rhythm). Many medical problems may cause it. Some of these include coronary artery disease, pneumonia, hyperthyroidism (over-active thyroid gland), a diseased heart valve, excessive alcohol use, and enlargement of one or more chambers in the heart. Earlier than expected mortality of large populations results from either the underlying condition causing atrial fibrillation or from a stroke caused by atrial fibrillation. There is a distinction between *acute* and *chronic* atrial fibrillation. Chronic atrial fibrillation means that one is always in an irregular heart rhythm. It is usually a sign of underlying cardiovascular disease and one's chance of having a stroke is high. It will usually require a low to medium rating. The chance of having a stroke is greatly lessened if the individual is taking the blood thinner, Coumadin. Aspirin, to a lesser extent, also helps to prevent strokes in those with chronic atrial fibrillation. Thus, a lesser rating could be expected with normal cardiovascular testing and/or if the applicant is on a blood thinner. There are two types of acute atrial fibrillation. Paroxysmal Atrial Fibrillation means that on one or more occasions, a self-limited episode occurred. The second type is Lone Atrial Fibrillation. It usually occurs in individuals younger than 60 years with no recognizable heart disease.

Questions:

- Is the applicant on a blood thinner such as Coumadin and/or aspirin? If so, what?
- What other medicines is he/she taking?
- In the past five years has the applicant been hospitalized for any heart condition?
- Is there a history of heart disease, stroke, or circulatory problems of the legs?
- Has the applicant had an echocardiogram, exercise treadmill, or a cardiac catheterization over the prior 3-5 years?
- What quantity of alcohol does the applicant drink?

Rating:

Lone Atrial Fibrillation occurring five or more years ago in an individual who is on no medication for this condition generally would be seen as Standard.

Paroxysmal Atrial Fibrillation episodes within three years of underwriting may generate a low to medium rating. The age of the applicant and number of episodes are among the factors that determine the rating. A more favorable action would be expected for younger individuals, for fewer episodes, and for brief durations of the episodes of atrial fibrillation, i.e., lasting less than 12-24 hours.

Chronic Atrial Fibrillation as a lone problem requires a low to medium rating. If one has chronic atrial fibrillation and has had congestive heart failure, stroke, or myocardial infarction (heart attack), a high rating or declination can be anticipated. Answers to the above questions will better pinpoint the underwriter's estimate.

Attention Deficit Disorder

Description: This condition is a common problem in young school aged children. It is characterized by short attention span and behavior problems. Impulsiveness and risk taking are often part of the behavior. In the teenage years and beyond, these attributes alone or with substance abuse make one vulnerable to accidents.

Questions:

- How is the condition treated (including name and dosage of medicine)?
- How successful is the treatment?
- Is there any usage of alcohol? If so, how much?
- If so, how much on daily basis.
- Is there any history of substance abuse? If so, please provide details.

- Is there any history of depression? If so, please provide details.
- If applicable, how well does the applicant function in school (grades)?
- If applicable, how well does the applicant function at work? How many different jobs has he/she had in the past five years?

Rating: At ages under 7, coverage may be variably rated or even postponed. At ages 8 through 19, Standard with good control and low rating with less than optimal control. At ages over 19, an individual who is in good control should be standard. Those having significant behavioral problems, especially impulsive behavior or alcohol/drug abuse, may be highly rated or uninsurable.

Blood Pressure (Hypertension)

Description: From an underwriting perspective, normal blood pressure is less than 140/90. However, if someone has had a stroke or heart attack, or has kidney insufficiency or diabetes, the blood pressure should not exceed 130/80-85. Heart attacks, kidney failure, and strokes are much more common in the person who has high blood pressure. Also, the elderly are more susceptible to the ill effects of high blood pressure than is the younger population.

Questions:

- What medicines (and dosages) does the applicant take?
- What other medications are prescribed?
- In the past five years, has the applicant had an echocardiogram (heart ultrasound test) or exercise treadmill? If so, when, where, and results?
- Does the applicant recall his/her last few blood pressures? If so, what were they?
- Does the applicant take and record his own blood pressure? Is a photocopy of the blood pressure readings available?
- Is there any history of diabetes or heart disease?

Rating: In an applicant younger than age 45 who is otherwise healthy, has no other coronary risk factors (see this section below), and whose blood pressure is in the 141-145/91-94 range, often a standard offer can be made. Preferred is available to those on medication for high blood pressure if all blood pressure readings on the insurance exam, and those noted in the APS (while on medication) are normal. Treated high blood pressure does preclude a Preferred Plus (best) classification. Any rating placed on blood pressure elevation could be based, in part, on co-existing problems such as obesity, heart disease, stroke history, ratable lipids, or smoking. Different combinations of these factors may lead to a low to medium rating for blood pressures in the 160-170/95-104 range.

Bronchitis (Acute)

Description: This is a respiratory condition characterized by a productive cough present no more than three months (chronic bronchitis = persistent coughing for more than three months).

Questions:

- What restrictions to daily activities does bronchitis cause?
- Does the applicant smoke?
- How is the condition treated (including medicines)?
- How many bouts of bronchitis has the applicant had over the past 3 years?
- Does the person have chronic obstructive disease (COPD) or emphysema?
- Have there been any chest x-rays and/or breathing studies (pulmonary function tests) done?

Rating: Acute, no underlying lung disease, is standard. Chronic bronchitis will likely cause a low rating. In the presence of chronic lung disease, the severity of the chronic lung disease defines the rating. (See that section for details.)

Bulimia Nervosa

Description: This eating disorder is characterized by recurrent binge eating followed by purging i.e., vomiting and use of laxatives and diuretics. Bulimia may be found in 2% of females; the incidence is much higher among university women. The predominant age is adolescents and young adults. Different body systems may become dysfunctional including endocrine/metabolic, nervous system, psychiatric, gastrointestinal, and cardiovascular. Often, there are concurrent emotional problems. Although the condition can be treated as an outpatient, one must be hospitalized if there is lab or ECG evidence of marked electrolyte (salt) imbalance, marked dehydration, or if there has been no response to outpatient therapy.

Questions:

- Date of onset?
- Are there any emotional diagnoses such as depression?
- Have there been any hospitalizations? If so, when and why?
- Prescribed medications?
- Has there been any recent blood testing?

- Who is the physician following this condition?
- Is the applicant seeing a psychiatrist, internist, psychologist or MSW (master of social work) for this condition?

Rating: Six months after recovery, a medium rating might be expected for stable, uncomplicated situations.

Cancer

Description: The sweeping extent of this impairment prevents any realistic projection. Medical science has made remarkable advances in certain types of cancer while other forms continue to frustrate the researchers. Underwriting begins its assessment of cancer histories with the "Staging" (the extent of the spread). The specific type of the cancer, its name, location, the size of the tumor, whether it invaded adjacent tissue, the involvement, if any, of nearby lymph nodes, and whether there was distant metastasis (distant spread) are all important factors. Other important types of prognostic information are the type of treatment (surgery, radiation, or chemotherapy), the results of subsequent "tumor marker" testing, and the time elapsed since the final treatment. All these combine to effect the final underwriting classification. The quality of cancer follow-up plays a significant role in the overall assessment of the case.

Questions:

- Type of cancer?
- Date of diagnosis?
- Were any lymph nodes positive?
- How was it treated, and what is the date of last treatment (this may be the date of surgery or last radiation treatment or last cycle of chemotherapy)?
- Has there been any recurrence?
- Has the applicant returned to normal daily living?
- Who is the main physician following the cancer?
- Has there been any diagnostic testing done as part of the cancer surveillance? This may include imaging like a CAT Scan or MRI, colonoscopy, x-rays, or certain types of blood tests.
- If cancer surveillance tests such as these have been done, where and when? What were the results of these tests? Who has these results?

Rating: Most cancers cannot be considered for 2-4 years after completion of treatment. There is no such thing as a typical colon cancer or a typical breast cancer. The underwriter always needs the APS that includes a biopsy report before providing a meaningful

assessment. If the cancer has metastasized (spread to a distant site), the applicant is generally considered uninsurable. Testicular cancer is an exception to this. Once the postponement period is satisfied, the ratings applied are usually temporary flat extras, ranging from \$5.00 extra per thousand to \$20.00 extra per thousand. These flat extras typically decrease incrementally over the course of 4-7 years. A few types of cancer will additionally have a permanent Table B rating. Breast cancer is an example of a type of cancer that has a high life long recurrence rate which may necessitate a permanent B rating. Two types of cancers that usually are not rated are basal cell cancers of the skin and squamous cell cancer of the skin. Many people experience both these tumors on the face. Some cancers are classified as "Carcinoma In Situ". These very early cancers can often be standard after treatment.

Cardiomyopathy

Description: This is a condition of a weakened heart muscle. The heart's inability to "squeeze" properly results in its failing as a pump. More often than not, the heart's function is permanently, severely compromised. If severe enough, the resulting increased mortality does not allow us to insure the applicant.

Questions:

- What medicines is the applicant taking?
- When was the onset of this condition?
- What is the underlying cause of the cardiomyopathy?
- Over the past five years, has the applicant had any of the following tests: echocardiogram, treadmill, or catheterization?
- What is the applicant physically able to do?
- What is he not able to do?
- How much alcohol does the applicant drink on a daily basis?

Rating: This is nearly always uninsurable.

Cerebral Palsy

Description: This term describes a non-progressive disorder of movement or posture that is a result of a central nervous system abnormality that occurred prenatally or during the first three years of life. Below are the characteristics of cerebral palsy.

- Spasticity
- Contractures (unable to straighten out a part of a limb)
- Mental retardation may or may not be present
- Abnormal phonation in speech

- Spastic (scissor) gait
- Seizures

Questions:

- What prescribed and over-the-counter medicines is the applicant taking?
- What is the extent of the physical or mental disability?
- How dependent is the applicant on others to provide care?
- Is the applicant confined to a wheel chair?
- Does the applicant work outside the home?
- How well does the school-aged applicant function physically and academically in school?

Rating: Coverage is generally not available until age 5 or later if disability is more than mild. Older children, adolescents, and adults might have a low rating if walking requires braces or a walker or if there is impaired bladder function. Those confined to a wheelchair or requiring a catheter may not be insurable.

Cerebrovascular Accident (Stroke)

Description: A stroke is to the brain as a heart attack is to the heart. Cessation of circulation in the brain results in a stroke, death to part of the brain. A transient ischemic attack (TIA) is a stroke warning much like angina pectoris is a heart attack warning. The most common type of stroke results from the formation of a blood clot in one of the brain arteries. Predisposing factors include smoking, diabetes, heart disease, high blood pressure, and previous history of stroke or transient ischemic attacks (TIA). One is likely to have coexisting heart disease if he/she has had a stroke or TIA.

Questions:

- What blood thinner is being used, if any?
- What are the names and dosages of all of the applicant's medications?
- Does he/she smoke?
- How many strokes has he/she suffered?
- Is there any residual impairment?
- What physical limitations are present?
- Has the applicant had heart testing such as an exercise treadmill or echocardiogram?

- Does the applicant have any of the predisposing problems listed above?
- Has he/she had any transient ischemic attacks? (see that section for details)

Rating: All forms of stroke require a postponement period of generally one year. After one year, the rating varies from a low to medium rating if the stroke occurred in the absence of predisposing problems, and the follow-up is good. To qualify for this rating, these applicants must have no residual problems; e.g., walking, talking, caring for themselves, thinking, etc. A temporary flat extra for up to 5 years after the stroke may be appropriate for more serious cerebrovascular events. Residual problems may also necessitate an increase in premium. Those having recurrent strokes or the combination of a stroke combined with diabetes or ratable hypertension are probably uninsurable. Those confined to bed or a wheel chair or those suffering mental deterioration, in addition to suffering from a stroke, are not likely to be insurable.

Cirrhosis of the Liver

Description: Cirrhosis is advanced liver disease that is characterized by diffuse scarring and failing functioning of the liver. Chronic alcohol abuse and chronic hepatitis are two of many causes of cirrhosis. Conditions such as ascites (large quantities of fluid in the abdominal cavity), esophageal varices (varicose veins in the lower esophagus swallowing tube), hypersplenism (the overactive spleen "filters and traps" more blood products than it should), and hepatic encephalopathy (altered mental status) are ominous complications.

Questions:

- When was the diagnosis made?
- How was the diagnosis made?
- Was a liver biopsy done?
- Is there a history of hepatitis?
- Is there family history of cirrhosis? Family history of alcoholism? Family history of emphysema?
- What is the underlying cause of the liver disease?
- Does the applicant drink any alcohol?
- Have there been any episodes of gastrointestinal bleeding?
- Has the applicant been seen in the emergency room or has he been hospitalized for any reason in the past five years? If so, when and for what reason?

Rating: All forms are serious and uninsurable if present. In rare situations an applicant may be insurable at a high rating.

Cholesterol

Description: *Hyperlipidemia* is a term that means elevated blood fats. In the otherwise healthy individual, cholesterol should not exceed about 220. The "good" fraction of cholesterol is the high density lipoprotein (HDL), and the "bad" fraction of cholesterol is the low density lipoprotein (LDL). If an individual has a history of coronary artery disease, his total cholesterol should be less than 200, and his LDL should be less than 100. Triglycerides in an individual with coronary heart disease should be less than 150. The "statins" are considered the drugs of choice for most people with elevated cholesterol. Examples of these medicines are Mevocar, Zocar, Lipitor, and Pravacol. One should be fasting for at least six hours to obtain a reliable blood test result.

Questions:

- What is the name of the cholesterol medication(s) the applicant is taking?
- Does the applicant take aspirin (as a blood thinner)?
- Has the applicant had any history of stroke or heart disease?
- When was the last blood work for the hyperlipidemia condition? Results?
- Is there a family history of high cholesterol or heart attacks or stroke less than age 50?

Rating: Ratings do not generally occur until cholesterol exceeds 300, unless the good cholesterol (HDL) is particularly low (30 or less). A low to medium rating may be assessed for very elevated cholesterol results. Some leniency occurs for applicants without cardiovascular or cerebrovascular disease.

Cholesterol levels from 250 upward, if not ratable in of itself, this condition may contribute to a rating for applicants who are overweight, hypertensive, have a family history of heart disease before age 60 or smoke cigarettes.

Chronic Obstructive Pulmonary Disease (COPD)

Description: The physician making this diagnosis is taking into account a variety of possible symptoms, from constant coughing, to lung wheezing, shortness of breath with even modest effort, frequent pneumonia, weight loss and a number of other findings. Long standing asthma and long standing bronchitis cause changes in the lungs that result in "chronic lung disease". The result of progressive long-standing, chronic lung disease is emphysema. Breathing testing,

emergency room visits, hospitalizations, and degree of disability help define the extent of the COPD.

Questions:

- Does the applicant smoke? If so, how much daily?
- What are the names and dosages of all respiratory related medications?
- Does the applicant use home oxygen? If so, is it only at night or 24 hours a day?
- On the average, how far can the applicant walk on a flat surface before he/she becomes winded?
- Is the applicant restricted from doing any activity because of COPD?
- Has the applicant had any *pulmonary function tests* (breathing testing) done over the past 3 years? If so, what were the results?
- How many emergency room visits and hospitalizations has the applicant had over the past three years?
- Does the applicant measure his own breathing capacity? If so, what are the results?
- Who has the medical records that cover this condition?

Rating: When the symptoms are very mild or the diagnosis of COPD is not substantiated, standard coverage is possible. A low table rating is used for mild disease. Correspondingly, advanced degrees of COPD call for higher ratings. Severe symptoms preclude coverage. Those who continue to smoke with this condition will have an additional 2 – 4 tables added to the baseline rating or they may be declined. The presence or absence of other medical conditions such as heart disease influences the mortality assessment.

Chronic Obstructive Lung Disease (COLD) = COPD (see above)

Chronic Fatigue Syndrome (CFS)

Description: The cause of this condition is not known. Its treatment is supportive, there are no curative medications. There is no testing that is useful for its diagnosis. The diagnosis of CFS is made by excluding other conditions. Depression, chronic digestive problems, and chronic pain problems may be coexisting conditions. An APS will generally be obtained.

Questions:

- When was the diagnosis first made?
- What tests have been done?

- How is the applicant treated?
- Is the applicant working or attending school?
- What limitations of physical activities are necessary?
- Is the applicant on disability?
- Is there a history of depression?
- From whom can medical records be obtained?

Rating: Standard acceptance is probable, but major depression, unusually severe fatigue, and other organic disorders must not be present. The most serious situations could be declined. Recent onset within the past 6 months may cause postponement, as could those situations not adequately investigated or medically followed.

Congenital Heart Disease

Description: Congenital heart disease means that there is a birth defect of the heart or great blood vessels. Some of the more common diseases include *Patent Ductus Arteriosus, Ventricular Septal Defect, Atrial Septal Defect, Atrioventricular Septal Defect, Coarctation of the Aorta, Congenital Valvular Stenosis, Pulmonic Stenosis, Tetralogy of Fallot, and Total Anomalous Pulmonary Venous Connection.*

Questions:

- What is the name of the congenital disorder?
- When and where was the surgery done?
- When was the last follow-up? By whom?
- How far can the applicant walk on a flat surface before becoming too winded to proceed?
- Are there any physical activities that the applicant has been advised not to do? Does he/she have any other limitations because of heart disease?
- Has the applicant had any heart testing, e.g. exercise treadmill, echocardiogram, resting EKG or heart catheterization in the past five years?
- Where can the relevant medical records that include notes, surgical reports and heart testing results be obtained?

Rating: Most of these disorders are uninsurable until repaired surgically. After successful surgery, offers can generally be extended on a standard to low to medium ratings, depending upon length of time since surgery and the complexity of the specific disorder. Incomplete surgical repair or permanent complications will often result in declination.

Coronary Artery Disease Risk Factors

"CAD risk factors" is a common term meaning a set of conditions that increase an individual's chance of developing coronary artery disease. Some of the more significant risk factors are:

- Family history of premature (less than 50 years) onset of coronary artery disease
- Elevated lipids (cholesterol, especially with a low HDL cholesterol and high LDL cholesterol)
- Diabetes mellitus
- High blood pressure
- Smoking
- Sedentary life style
- Male gender

Crohn's Disease - See Ulcerative Colitis. Underwriting Crohn's is similar to ulcerative colitis.

Cushing's Syndrome

Description: Cushing's syndrome is caused by excessive body levels of adrenal hormone called *glucocorticoids* such as cortisol, either from the adrenal cortex (making excessive quantities) or from use of cortisone medication, e.g. Prednisone. The problems that excessive (cortisone) hormone causes are increased fatty tissue in the neck and trunk, central weight gain, emotional problems, high blood pressure, osteoporosis, diabetes or glucose intolerance (high blood sugars), muscle weakness due to loss of muscle mass, and skeletal growth retardation in children. Many of these problems predispose one to heart disease. It is for this reason that long standing use of Prednisone, which is used for many disease states creates so many additional problems for the individual.

Questions:

- What is the cause of the applicant's Cushing's Syndrome.
- What medical or surgical treatment has been used to treat the condition?
- What medicines are the applicant currently taking?
- How long has the condition been stable?
- Has the applicant been on Prednisone or some other form steroid medication?

- Who would have medical notes that give relevant information about Cushing's?

Rating: If present, the applicant is uninsurable. After one year of successful treatment, a low to medium rating may be applied. After about three years of stability after successful treatment, a standard classification is likely.

Cystic Fibrosis (CF)

Description: CF is the most common lethal genetic disease in Caucasian populations. Those with it have a median survival of approximately 30 years. The diagnosis of CF is confirmed when a person has either typical lung or gastrointestinal manifestations or a history of CF in the immediate family, and an elevated sweat chloride test. Those with CF have excessively thick and tenacious mucus and obstruction of the pancreatic ducts with secretions. This leads to malnutrition. The respiratory problems consist of chronic airway infection that accounts for most of the morbidity and mortality associated with CF. Other problems that may occur are intestinal obstruction, diabetes mellitus, gall stones, cirrhosis, retardation of growth, and bone age, nasal polyps, chronic sinusitis, sterility, and infertility in men. The goals of therapy for the respiratory problems in cystic fibrosis are to decrease infection, to remove as much mucus from the airways as possible, and to maintain adequate nutrition. Lung transplantation is appropriate for some individuals.

Questions:

- Does the applicant smoke?
- What are his/her medications?
- How far can the applicant walk on a flat surface before becoming too winded to proceed?
- Is the applicant on oxygen? If so, only at night or 24 hours a day?
- What has been the frequency of hospitalizations over the past five years? Frequency of emergency room visits over the past three years?
- When was the last hospitalization?
- Who can be contacted to obtain medical records that include office notes and lung testing results?
- Describe the applicant's (family) support?
- How chronically ill does the applicant appear?
- Has there been any weight loss in the past six months?

Rating: Uninsurable until age 30. Afterward age 30, a high rating to declination should be expected.

Cystitis – This is a condition of inflammation of the lining of the bladder. Often, it results from infection. No rating is usually necessary.

Dementia - See Alzheimer's

Depression

Description: This impairment is based upon information from the applicant or contents of an APS that states the diagnosis or describes symptoms of depression, especially if the prescribed treatment is an antidepressant. Depending on the age and gender of the applicant, and based on the extent of the symptoms, an assessment of the degree of depression is ascertained. Depression may be only a mild form characterized by fatigue and feeling "blue", to a more significant form characterized by repeated attempts of suicide, repeated psychiatric hospitalizations, recent psychiatric hospitalization, family history of suicide, older individuals losing a spouse within a year, and co-existent substance abuse. Psychiatric follow-up, psychiatric hospitalizations, family history of depression, and/or suicide attempts, the type and dosages of his/her psychiatric related medicines, his/her response to therapy, and family support are all important factors of mortality.

Questions:

- What was the age of onset of depression?
- What over-the-counter and prescribed medicines are used?
- Are there any extenuating circumstances for current depression?
- Is a physician or therapist regularly following the applicant? If so, at what frequency? When was the last visit?
- Is the applicant under the care of a psychiatrist?
- Is the applicant's depression in remission? If so, for how long?
- Is there a history of bipolar depression (manic-depression)? Panic attacks?
- Has there been any history of drug abuse? Of alcohol abuse?
- Is alcohol currently consumed? If so, how much per day?
- What is the applicant's functional status at home and at work?
- Have there ever been any attempts of harming himself/herself? If so, when, and how? How many times has the applicant attempted suicide?
- Have there ever been any psychiatric related hospitalizations?

- Is there any family history of suicide?
- Is there any family history of depression?

Rating: Symptoms that are mild might be underwritten at standard; moderate symptoms (briefly off work, multiple recurrences, monitored by a mental health professional, brief hospitalization) may warrant a medium rating. Finally, severe (use of electro-shock therapy, suicidal thinking or attempts, poor control of depression) or recent (within 6 months) psychiatric hospitalization will be postponed or declined.

Diabetes (Types I and II)

Description: Diabetes mellitus is a disorder of carbohydrate (complex sugars) metabolism. The exact cause is unknown but the main abnormality is either the inability of the pancreas to secrete (release) enough insulin, or the body's inability to utilize the secreted insulin. Either of these abnormalities results in blood sugars being above the normal 60-110 mg/dL blood sugar range in the fasting state.

Genetics play a role in diabetes. There are genetic markers that clearly indicate an increased risk of developing diabetes. However, there are also other genetic markers that appear to provide protection from developing diabetes. Thus, if there is a family history of diabetes, the applicant is at an increased risk for developing diabetes.

Diabetics need to be knowledgeable about their disease and adhere to the prescribed diet, exercise, weight, and medication regimens. Diabetics in good control are those individuals who have minimal hyperglycemia (elevated blood sugar) and very infrequent hypoglycemic (low blood sugar) episodes. Those who also are free of diabetic related complications (see below), have the longest life expectancy.

Diabetics are either Insulin Dependent (IDDM) (Type I), or Non Insulin Dependent (NIDDM) (Type II).

I. Non Insulin Dependent Diabetes = NIDDM = Adult Onset Diabetes = Type II Diabetes

This type of diabetes may result from defects in insulin secretion (i.e. too little insulin) and/or the body's inability to utilize the insulin that is produced. It accounts for 80% of diabetic cases. The body systems affected are endocrine/metabolic, nervous, kidney, cardiac, and vascular (all arteries). In the United States, the prevalence is about 5% (half of whom have not been diagnosed yet!). Diabetes generally develops after age 40. Risk factors include being overweight, family history of diabetes, and history of gestational diabetes (diabetes during pregnancy). The most common cause of death for Type II Diabetics is vascular blockage, especially coronary artery disease that may cause heart attacks.

Criteria for diagnosis (any one of the following 3):

1. Symptoms of diabetes (excessive thirst, excessive urination, or unexplained weight loss) plus a random or nonfasting plasma glucose of 200 mg/dL or greater
2. Fasting plasma glucose 126 mg/dL on 2 occasions
3. 2 hour plasma glucose 200 mg/dL during a standard glucose tolerance test

Note: "Borderline" diabetes is a dated term. One is either diabetic or not diabetic defined by the above criteria. If he/she falls somewhere just under the above criteria, the term *glucose intolerant* is used. These people often progress to diabetes, but we do not assume this in underwriting. Also, since being overweight can make someone less sensitive to insulin that his pancreas is producing (this is explained below), then weight loss can reverse this. Thus, some individuals who are diabetic can become non-diabetic with appropriate weight loss.

POSSIBLE COMPLICATIONS

Damage to the arterial walls (coronary arteries, major head, neck, and leg arteries) is the main cause of death. Others include:

- Peripheral neuropathy – causing numbness and tingling of the hands and feet
- Proliferative retinopathy - leading to blindness
- Kidney failure
- Coma
- Gangrene of extremities
- Glaucoma
- Cataracts
- Skin ulceration
- Slow healing

The medicines for diabetes have proliferated over the past few years. A summary of their names is as follows:

- Oral agents (trade names)
- olbutamide (Orinase)
- Tolazamide (Tolinase)
- Chlorpropamide (Diabinase)
- Glyburide (Diabeta, Micronase)
- Glipizide (Glucotrol)

- Glimepiride (Amaryl)
- Repaglinide (Prandin)
- Troglitazone (Rezulin, Prelay)
- Metformin (Glucophage)
- Acarbose (Precose)

Insulin - Regular, NPH, Lente, Ultralente, Humulin N, Humulin L, Humulin R, Humulin 70/30, Humalog

Insulin may be used in combination with some of the oral agents. Some of the new oral agents are also used in combination with other oral agents.

II. Insulin Dependent Diabetes = IDDM = Childhood Onset Diabetes = Type I Diabetes = Juvenile Diabetes

Type I Diabetes is a chronic disease caused by the pancreatic gland being unable to secrete (release) enough insulin. This results in hyperglycemia (elevated blood sugar) causing organ complications such as accelerated atherosclerosis (hardening of the arteries), neuropathy (damaged nerves), nephropathy (kidney disease), and retinopathy (eye disease eventually causing blindness). The mean age of onset is 8-12 years and it peaks in adolescence. Children less than 6 years old have a greater degree of seasonability. Their average body builds is usually normal or event slight. Compared to Type II diabetics, the Type I diabetics have rapid, wider swings of blood sugars. Because of this, Type I diabetics have a more difficult time controlling their blood sugars. This is referred to as *brittle diabetes*. These young people require insulin.

The symptoms of Type I diabetes are similar to those of Type II diabetes. They include excessive thirst, frequent and excessive urination, blurred vision, and feeling tired. Weight loss may be 10-30% of the usual weight. Other symptoms may include loss of appetite, muscle cramps, emotional irritability, headaches, and nausea.

Because of the age of the Type I diabetic and the complexity of its management, a team approach that includes the physician, dietitian, nurse practitioner, and counselor enhance the medical care. The diabetic team strives to help the patient to:

- have blood sugar control within defined blood glucose levels in the range of 80-150 mg/dL;
- avoid bouts where blood sugar is too low (hypoglycemic insulin reactions);
- maintain a hemoglobin A1C level that is as close to normal as possible;
- enjoy verall good health ;

- maintain normal lipids (body fats);
- maintain normal growth and development;
- reach optimal height for genetic potential;
- enjoy normal psychosocial development;
- normal school or work attendance and performance;
- normal future goals and career plans;
- prevent acute complications;
- prevent or delay chronic complications (especially to eyes, kidney, and heart).

The types of complications are those of "microvascular disease" (disease of the very small vessels) that result in retinopathy (eye), nephropathy (kidney), neuropathy (nerves). Other complications include hyperlipidemia (high body fats), "macrovascular disease" (coronary and cerebral artery disease), and psychologic problems related to chronic disease.

Therapy: Injected insulin. In some individuals a small insulin pump that is worn. It gives insulin continuously and provides additional amounts before meals.

Blood sugar monitoring is necessary by using a home blood glucose meter (One-Touch, Accucheck, Glucometer, etc.) 3-4 times daily, with adjustment/supplementation of insulin dose based on blood glucose levels. Periodic (about every 3 months) measurement of hemoglobin A1c (akin to an eight week blood sugar average) to assess the overall blood sugar control. When therapy is started, there is an initial remission or "honeymoon" phase with decreased insulin needs and easier overall control that usually lasts 3-6 months. Today, the diabetic enjoys increased longevity and improved "quality of life" with careful blood glucose monitoring and improvement in insulin delivery regimens and systems. Blood sugar control using conventional self-injections 3 times daily may be equally as effective as an insulin pump. Monitoring one's blood sugar and acting on these readings appropriately, define one's diabetic control. Good diabetic control minimizes diabetic complications in most diabetic individuals. At this time, life expectancy is still reduced but has improved over the past 20 years. The main causes of death are kidney failure and heart disease.

Questions:

- When was diabetes diagnosed?
- Who gives diabetic care, family physician or endocrinologist?
Frequency of follow-up?
- How is the diabetes treated? Name(s) and dose(s) of diabetic medicine(s)?

- What other prescribed and/or over-the-counter medicine is the applicant taking?
- Does the applicant check his/her own blood sugars? If so, are they available for review?
- Does the applicant have high blood pressure?
- Are there any other complications of diabetes, i.e. kidney, heart, or eye related diseases?
- Has the applicant had his urine tested for protein? If so what are the results?
- Has the applicant had any vascular-related testing, i.e. exercise treadmill or arterial vascular testing in legs? (doppler testing)? If so, what are the results?
- Has there been a past history of stroke or heart attack?
- What is the applicant's exercise regimen?
- Where can medical records be obtained?

Rating: There are numerous variables impacting the underwriting classification of diabetes. If the applicant is discovered during the insurance exam to have blood tests suggestive of diabetes, it may be in his/her best interest to postpone until the applicant has been under adequate treatment and good control for at least 3-6 months. This would allow the individual to be properly diagnosed and treated, and would allow us to assess his/her risk more favorably. In documenting the control of diabetes, it would be beneficial to have the home blood sugar checks as a part of the medical records. This allows the underwriter to make a more accurate and fair assessment.

The chart below gives a rough estimate of how ratings may be applied to applicants whose diabetes is uncomplicated and who have no other medical conditions that add to diabetes related mortality.

BASIC RATINGS IN CASES WITH WELL CONTROLLED DIABETES – GUIDELINE*

	Type II (NIDDM)		Type I (IDDM)	
	Diet therapy or oral medication and/or insulin		Insulin	
Age at time of application	All Durations		0-10 years of insulin	10+ years of insulin
0-14	Decline		Decline	Decline
15-24	High		High	Decline -High

25-29	Med		High	High
30-39	Low/Med		Med	High
40-49	Low		Low/med	Med
50 up	Low		Low	Med

***Ratings are most favorable in the following:**

- Diagnosis after age 50
- No smoking history
- Good control [fasting blood sugars (FBS) <120 mg/dL], blood sugar measured 2 hours after eating <160 mg/dL
- Current HbA1C and fructosamine are normal
- No diabetic complications (cardiac, vascular, kidney, eye, stroke); no high blood pressure
- No microalbumin (protein) is found in the home office urine specimen nor noted in the APS
- Lipids (body fats) are normal in the home office blood profile and/or the APS
- Self monitoring of blood sugar (noted in the APS) and self care are good
- Medical follow-up is good
- Coronary artery disease screening tests such as an exercise treadmill is normal

Additional information: Non-insulin dependent diabetes:

Basic ratings assume good control. (See chart above.) However, in all cases it is necessary to document an applicant's degree of control to determine if additional debits are appropriate. To assess mortality, we obtain an attending physician's statement (APS). It should include results of all laboratory and cardiovascular studies. This is in addition to the current exam, HOS with the blood profile including a hemoglobin A1C and fructosamine (akin to an eight week average of blood sugars and 2-3 day blood sugar average, respectively), and EKG depending age and amount requirements. The APS of the diabetic applicant is screened for the presence of chronic complications associated with diabetes mellitus: atherosclerosis (hardening of the artery disease), diabetic nephropathy (kidney disease), diabetic retinopathy (eye disease), and diabetic neuropathy (nerve damage).

In general, underwriting handling is slightly more favorable for the non-insulin dependent diabetic and for diabetics over 50 years of age.

Although special circumstances may allow for a standard rating, a low rating usually results for applicants over age 50, who have been diabetic for 10 years or less and who are non-insulin dependent diabetics (NIDDM), and whose control is good on diet therapy or oral agents only. Medium ratings are usually given to diabetics under age 50 and for those who have had diabetes for many years. Also, if the urinary testing shows a significant amount of albumin (protein), the chances of co-existing coronary artery disease or its future occurrence is much higher. This urinary protein loss (*albuminuria, proteinuria*) may also be a sign of *diabetic nephropathy*, a diabetes induced form of kidney damage. Ten to twenty years after its onset, this complication often causes kidney failure. If so, the applicant must use dialysis (kidney machine) or undergo a kidney transplantation to survive. A high rating or declination may be expected with the presence of albuminuria or proteinuria. Other factors that effect the rating for individuals diagnosed with diabetes include: obesity (defined as one being 20% over ideal body weight), elevated blood pressure, high cholesterol levels, abnormal EKG interpretation, tobacco use, history of heart disease, history of stroke, and vascular disease. The presence of one or more of these compounds a diabetic's mortality; a higher rating may be necessary. For example, a declination could be anticipated if the applicant has the combined problems of diabetes, history of heart attack, inadequately controlled blood pressure, and smoking history.

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Additional information on Insulin dependent diabetes:

Heaviest ratings occur for diabetics who are in their 20's or younger. Also, if the urinary testing shows a significant amount of albumin (protein), the rating would be high or declined (see previous section). These applicants will be assessed in the same manner described in the previous section.

Diabetics treated with insulin will be rated, but this rating could be low if diagnosed after age 50, there are no other complicating medical problems, and the diabetes is well controlled. The child or young adult who has more brittle diabetes, i.e. difficult to control diabetes is the Type I form of diabetes. The complications and resulting mortality of the Type I diabetic is less favorable compared to a stable Type II (who may also require insulin therapy for optimal diabetic control). Thus, the rating for most Type II diabetics will be lower than most Type I diabetics.

Diverticulosis/Diverticulitis

Description: A *diverticulum* is a sac or pouch in the wall of the GI tract. Diverticulosis is the presence of diverticuli (multiple diverticulum), usually in the colon. About 50% of people over the age of 50 have diverticulosis; thus, it is very common. Diverticulitis is the inflammation of one or more diverticulum, which is at risk for bleeding, rupture, and infection (*abscess or peritonitis*).

Questions:

- How many attacks of diverticulosis have occurred over the past 3 years?
- Have there been any episodes of infection (diverticulitis)?
- Is there any treatment being taken for the condition?
- In the past three years, has any testing been done for the condition (CAT scan, colon x-ray, or colonoscopy)?
- Has surgery ever been done for the condition? Is any planned?

Rating: Standard when accidentally discovered without symptoms (diverticulosis). Symptoms or attacks of infection (diverticulitis) within the preceding year or two could require a low rating. If corrected surgically, the applicant may be rated for a year after surgery.

Drug Abuse

Description: Drug abuse results in a much higher than expected mortality. This is primarily due to violent and accidental deaths. Other causes of early death include AIDS, viral hepatitis (B and C), infected heart valves, and numerous other problems. Those most likely to be successful in drug abuse recovery have supportive families, maintain a steady employment, have good driving records, and regularly attend Narcotics Anonymous or Alcoholics Anonymous meetings. Family support is enhanced if the spouse attends a self-help group which is organized for the substance abuse problem. A thoughtful and factual cover letter that fully defines the drug abuse problem would best serve the applicant.

Questions:

- What types of drugs were used in past? What routes were used; i.e. oral, nasal, or intravenous?
- Does the applicant use any nonprescribed drugs now? When was the last time the applicant did?
- In addition to use of nonprescribed drugs, was alcohol abused in the past? Does the applicant drink any alcohol now?
- Does the applicant attend Narcotics Anonymous? If so, how long? How often?
- If there is a spouse, does he/she and/or other family members attend Alanon or participate in some form of psychotherapy?
- Has the applicant had any complication from his/her prior drug use, i.e. hepatitis?
- Has the applicant been hospitalized due to drug abuse or for psychiatric reasons?
- Is there a history of depression?
- Is there a family history of alcoholism or drug abuse?
- What type of family support is available?
- What is the name and address of the physician who would have the most complete records that includes substance abuse history?

Rating: The following drugs are the major causes of drug abuse: amphetamines, heroin, crack cocaine, cocaine, methadone, Demerol, opium, other narcotics, barbiturates, Valium, Xanax, Ativan, Meprobamate, other sedatives, LSD, PCP, peyote, and other hallucinogens. Alcohol is commonly abused in addition to any of these drugs. The first two years of abstaining from drugs are in a declination period. From years 2-5, the rating would generally be high or declined depending upon a multitude of variables. Marijuana also has

underwriting implications, but to a lesser degree compared to the list of drugs above.

Echocardiography

Description: The echocardiogram or "echo" is a noninvasive test that uses ultrasound to look at the heart. When an applicant mentions having had a test to check a *heart murmur* (see this section for details), assume that they mean an echocardiogram, rather than an EKG. The echocardiogram assesses the thickness of heart muscle, the muscle function (how well it "squeezes" and whether there are any scars from previous heart attacks), heart valve anatomy, and whether the lining of the heart (pericardium) is normal. The *ejection fraction* (EF) is the measured pumping efficiency of the heart. Normal is above 55%. A *doppler test* is often done in addition to the echocardiogram. It assesses the degree of *valvular insufficiency or regurgitation* (heart valve leaking) or the degree of *stenosis* (narrowing of the valve opening). The echo is generally more accurate than an EKG, and it may negate some of the abnormal findings of the EKG. It may also disclose heart problems that the electrocardiogram (EKG) failed to show. Serial echocardiograms are useful in better defining the course or stability of a heart related condition. Lastly, the echocardiogram may also be used to enhance an exercise stress test. A "resting" echocardiogram is done just before exercise. It is then compared with a second echocardiogram done immediately after the exercise phase of the stress test.

Questions:

- Has the applicant ever had an echocardiogram? If so, what were the results?
- Where can the results be obtained?
- Why was the echocardiogram done?
- Is there a history of a heart murmur?
- Is there a history of congenital heart disease?
- Is there a history of valvular heart disease?
- Is there a history of coronary heart disease or heart attack?

Rating: A common description in an echocardiogram report is valve leakage quantified as "trace" or "whiff ". This is taken to be normal. No underwriting action is taken. Mild degrees of heart muscle thickening (called *left ventricular hypertrophy or LVH*), mild to moderate valve dysfunction, or evidence of scars (presumably from a previous heart attack), are generally given a low rating. These same problems that are quantified as being more severe are correspondingly given a higher rating or even a declination. An ejection fraction of less than 55% may also be rated; the extent of the rating also corresponds to the numerical value. If the ejection fraction is low enough, the applicant could be declined.

Electrocardiogram (EKG)

Description: A resting EKG (the applicant is lying still as opposed to exercising) consists of twelve different leads, each providing information relative to a different geographical segment of the heart. It is a graphic representation of the electrical transmission through the heart muscle. Some of the abnormalities it may show are scars from previous heart attacks, "ischemia" or areas of inadequate blood flow due to coronary artery disease, heart rhythm problems such as atrial fibrillation, heart enlargement, and abnormal thickness of the heart muscle (sometimes as a consequence of high blood pressure and heart valve disease). An EKG may be normal when there is heart disease or it may be abnormal when there is no heart disease. Thus, the EKG must be interpreted in context to the applicant's age, medical history, and risk factors of heart disease. An EKG that suggests that a previous heart attack may have occurred or that the heart muscle is too thick may be supplanted by a normal echocardiogram. (See section that discusses echocardiography.)

Questions:

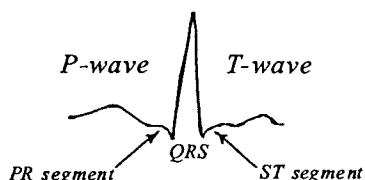
- Has the applicant had an EKG in the past (in order to compare it to the current insurance EKG)?
- Has the applicant had any heart testing (any form of exercise stress test, echocardiography, heart scan, or heart catheterization) in the past five years in addition to an EKG?
- What was the reason for the testing?
- Does the applicant have a history of heart disease (coronary or heart valve disease) or high blood pressure?
- Is there any past or current treatment for heart disease, i.e. – bypass surgery, angioplasty, pacemaker, etc.?
- What medicines is the applicant taking?
- If testing or heart history is present, where can the medical records be obtained?

Rating: Many slightly abnormal EKGs still permit standard coverage. However, an abnormal EKG from an applicant who has multiple risk factors of heart disease increases the likelihood of that EKG being a significant factor. Thus, in the proper setting, certain EKG abnormalities may justify low to high ratings, or even a postponement or declination. In a "what if" scenario, the EKG interpretation alone without any other clinical information, cannot form the basis for a tentative underwriting action. Often, previous normal cardiac testing can decrease or eliminate a rating based on the abnormal insurance EKG. Also, subsequent cardiac testing by an individual's physician after the insurance has been underwritten may add clarity to an abnormal EKG.

R FOR SUCCESS

Electrocardiogram and T-wave Changes

The heart has a "specialized conductive system" consisting of nerves and cells that allow quick and consistent passage of electrical impulses. The electrocardiogram (ECG) is a medical test used to measure the heart's electrical impulses, helping to discover problems in this system or possible underlying heart disease. The major components of the heart's electrical cycle are the *P-wave*, *QRS complex*, and the *T-wave*.



Abnormalities of the ST segment may consist of either abnormal straightening, depression, or elevation. ST segment changes can be caused by serious impairments such as hypertension or coronary artery disease. However, changes may also be related to medications (especially digitalis—a common drug used for treatment of atrial fibrillation) or abnormalities of the body's potassium content. When ST segment changes are further evaluated with a treadmill, thallium scan, arteriogram, exercise echocardiogram or other similar cardiac test, no rating may be possible if these above tests are normal.

T-wave changes are one of the most common abnormalities noted on an ECG. Changes in the T-wave may be a normal variant in some healthy individuals, or related to age, body configuration or position, medications, anemia, pericarditis, and a host of other conditions. T-wave abnormalities may also be caused by virtually any type of cardiovascular disorder such as coronary artery disease, valve impairments, and hypertensive cardiovascular disease. A serious underlying cardiac impairment is much more likely if the T-waves are deeply inverted rather than simply flattened. T-wave abnormalities are classified by their degree of abnormality. T-wave changes are either considered to be minor or major changes. Ratings will depend upon this classification and the presence or absence of other risk factors.

ST segment and T-wave changes with no known cardiovascular history are rated as follows:

	<u>Females Age 0-59 and Males Age 0-39</u>	<u>Females Age 60 and up and Males Age 40 and up</u>
ST segment changes	Table B	Table C
Major T-wave changes	Table B	Table C
Minor T-wave changes	No rating	Table B

Unfavorable factors which may result in a higher rating are: recent changes in the ECG pattern, recent chest pain, or poor cardiovascular risk factors.

Favorable factors which may reduce the rating are: stable ECG pattern for five years or more, normal treadmill, thallium or similar tests, or favorable coronary risk factors.

To get an idea of how a client with a history of ST or T-Wave changes would be viewed in the underwriting process, please feel free to use the *Ask "Rx" pert underwriter* on the reverse side for an informal quote.

The electrocardiogram is a simple and inexpensive test which is used in combination with other cardiovascular risk factors in the underwriting evaluation for significant coronary disease.

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Epilepsy

Description: Seizures may be caused by an underlying condition such as a brain injury (trauma) or brain cancer, or it may be "*idiopathic*", i.e. no known cause. The brain "short circuits" resulting in loss of consciousness or altered consciousness and involuntary muscle contractions. *Epilepsy* describes a condition in which a person has recurrent seizures due to a chronic, underlying problem. Thus, an individual with a single seizure or multiple seizures due to avoidable circumstances, such as alcohol abuse, does not necessarily have epilepsy. Epilepsy refers to a group of similar, clinical events rather than a single disease. There are many types of epilepsy, a common one is *grand mal seizure*. From a mortality perspective grand mal seizures are of greater concern than *petit mal and psychomotor* seizures. Children often "outgrow" epilepsy; they remain seizure free off anti-seizure medication. A few of the more common anti-seizure medications are Dilantin, Phenobarbital, and Tegretol.

Questions:

- When was the first seizure?
- When was the last seizure?
- What types of seizures does the applicant have, e.g. grand mal, petit mal, psychomotor, etc)?
- How many seizures has the applicant had over the past 3 years?
- Have there been any hospitalizations related to epilepsy (or seizures)? If so, when?
- What anti-seizure medicines does the applicant take?
- Does the applicant drink any alcohol? If so, how much per day?
- What is the applicant's occupation? Any avocation(s)?
- Is he restricted from driving or any other activity because of his seizures?
- How often is he seen for seizure follow-up?
- What is the name and address of the physician who is following the applicant for his seizures?

Rating: Ratings for epilepsy depend upon the type of seizure disorder, the number of seizures experienced annually, the date of the last seizure, avocations, occupations, driving record, and medical follow-up. The tables below may serve as a rough guide.

For all types of seizures EXCEPT petit mal and psychomotor, refer to the rating guide below.

Age 15 – 34 who average 1-6 seizures per year

DURATION SINCE LAST SEIZURE	DURATION SINCE ONSET OF SEIZURE DISORDER			
	0-1 year	1-2 year	2-5 year	5 + years or unknown
0-1 year	Postpone	High	High	Medium to high
1-2 year or unknown	---	High	Medium to high	Medium
2-5 year	---	---	Medium to high	Low
5+ years	---	---	---	Standard

For all types of seizures EXCEPT petit mal and psychomotor, refer to the rating guide below.

Age 35 and older who average 1-6 seizures per year

DURATION SINCE LAST SEIZURE	DURATION SINCE ONSET OF SEIZURE DISORDER			
	0-1 year	1-2 year	2-5 year	5 + years or unknown
0-1 year	Postpone	High	Medium to high	Medium
1-2 year or unknown	---	Medium to high	Medium	Low to medium
2-5 year	---	---	Low	Low to standard
5+ years	---	---	---	Standard

For other types of seizures and special situations, consult with the underwriter.

Family History

Description: Family histories of concern to the underwriter support an increased likelihood that the disorder may develop or may reoccur in close relatives, e.g. parent, child or sibling. One example is breast cancer. A mother who has had breast cancer may result in a greater chance of her daughter developing breast cancer. Also, a woman's treated breast cancer is more likely to recur if her mother had a history of breast cancer.

Questions:

- Is there family history of stroke or heart attacks before the age of 60?
- If so, at what age was the condition first diagnosed?
- Are there family members with cancer who were less than 40 years old when they were first diagnosed with cancer? If so, who was the relative (parent, brother, etc.)? Type of cancer?

Rating: In most cases, family history, by itself, does not prompt an adverse underwriting action. Existence of an adverse family history in an individual already manifesting a ratable problem and related risk factor likely will cause a modest increase in the overall rating. For example: if an applicant is assessed at a Table B - C because of heart disease and his/her parent died before age 50 of a heart attack, he may be more likely to be rated Table 3.

Family history criteria are used for preferred classification and can cause disqualification for Preferred. For example, a history of premature cardiovascular disease or stroke in multiple family members could disqualify for Preferred.

In general, a healthy applicant with no medical impairments will not be rated because of a family history of diabetes, epilepsy, TB, cancer, cardiovascular, renal disease or suicide. There are a few hereditary diseases that are exceptions. One example is a kidney disease called *polycystic kidney disease*. Because of the high probability of a child acquiring this serious condition from a parent who has it, he would not be standard until he is much older and has been shown not to have polycystic kidney disease.

Fatigue

Description: This is nonspecific symptom that describes the state of feeling tired.

Questions:

- Is there any associated diagnosis?
- Are any medications being taken for this condition?
- Is there a history of depression?
- Has there been any change of weight over the past six months?

Rating: Fatigue is a universal human experience and by itself, not ratable.

Fatty Liver

Description: This condition is caused by excess fat that is stored in excess in the liver. It may serve as an indication of underlying conditions such as diabetes, obesity, high body fats, or alcoholism. This condition is often responsible for elevated liver enzymes which are

part of insurance blood testing. It may also have been diagnosed incidentally when a CAT scan or ultrasound was done of the abdominal area. A few of these individuals will develop liver scarring (cirrhosis) as a result of fatty liver.

Questions:

- Has an underlying condition causing fatty liver been diagnosed?
- Does the applicant drink any alcohol? If so, how much per day?
- Has a liver biopsy been done? If so, what were the results?

Rating: Since it is generally not serious often we can offer a standard classification, but underwriting must fully investigate

Fibrillation/Flutter – See Atrial fibrillation

Fibrocystitis: (fibromyositis, fibromyalgia) is a common musculoskeletal disorder that consists of muscle pain and stiffness, fatigue, and poor sleep. It is often associated with other disorders including depression, headaches, colon related problems, and painful menses. Pain is poorly localized but spares the joints. As an independent impairment, a standard can be expected.

Gall Bladder Removed - Standard.

Gallstones If the symptoms are mild and infrequent, the applicant may be considered for standard coverage. Multiple attacks within the past two years may cause a low rating. If surgery is planned, the case would be postponed until its successful completion.

Gastritis is inflammation of the stomach lining. If there is no underlying cause such as alcohol consumption, and the symptoms are mild and infrequent, the case should be standard.

Gilbert's Syndrome is a benign genetic condition. The diagnosis is based upon an elevated liver blood test, *bilirubin*, and normal liver enzymes and no other liver disease or any other condition that can raise the bilirubin. A standard classification can be expected with this diagnosis.

Heart Attack (Acute Myocardial Infarction)

Description: A heart attack is also called *myocardial infarction* or a "MI". Acute myocardial infarction is the rapid development of heart muscle death resulting from a sustained and complete reduction of blood flow to a portion of the heart muscle. It is produced by a blood clot generated by a ruptured atherosclerotic *plaque*. These plaques are the consequence of hardening of the artery disease, arteriosclerosis. For purposes of this discussion, we will assume that the heart attack was caused from underlying disease of the arteries that supply blood to the heart muscle. These are called *coronary arteries*. Thus, we will be referring to *coronary artery disease* from this point on. About ½ of all heart attacks will suffer a sudden death as the initial symptom of

their coronary artery disease condition. Thus, many people who look and feel "great" can have critical coronary artery disease. The underwriting may uncover this problem if the EKG indicates a scar that may be the consequence of a "silent (having occurred without chest pain) myocardial infarction". The EKG may also show changes that reflect *ischemia* or compromised coronary circulation. The younger the age at which coronary artery disease is diagnosed, the more serious the situation.

The "risk factors" that render one more vulnerable to having a heart attack include:

- having had a previous heart attack
- having chest pain (angina) that is characteristic of heart related pain
- high cholesterol (especially if the "bad" fraction, LDL is high and/or the good fraction, HDL is low)
- smoking
- high blood pressure under inadequate control (should be 130-135/80-85 or lower range)
- sedentary life style
- diabetes
- Premature (<55) familial onset of coronary disease as part of the family history
- Aging
- Hostile, frustrated personality

A major benchmark used to assess long term mortality of coronary artery disease is the "ejection fraction". This measurement is part of many heart-related tests such as the echocardiogram. It reflects the amount of properly functioning heart muscle. An ejection fraction in the 60-70% range is favorable.

Many people with coronary artery disease undergo *Coronary Artery Bypass Grafting* (bypass) or *Percutaneous Transluminal Coronary Angioplasty* (balloon angioplasty), PTCA. Non-surgical treatment includes aspirin as a blood thinner, various heart medicines, aerobic exercise, diet or medicine controlled high body fats (lipids), and avoiding smoking. Controlling other medical problems such as diabetes and high blood pressure should also be done.

Among those with coronary artery disease, there are factors that improve their prognosis making them less likely to have progressive heart disease:

- Lipids that are favorable, including the bad fraction, LDL, being less than 100
- No history of heart attack
- A regular exercise program
- Good medical follow-up
- Aspirin therapy
- Recent objective testing showing stable disease – a plain exercise treadmill or a treadmill that is enhanced by heart scan or echocardiogram
- Blood pressure in a favorable range (see above)
- Smoking cessation if applicable
- Absence of other medical problems including high blood pressure, being overweight, high body fats, diabetes, and depression/anxiety

Questions:

- Does the applicant smoke?
- When was the heart attack or initial diagnosis of coronary artery disease?
- How many heart attacks has the applicant had?
- What are the names and dosages of the applicant's medicine?
- Does the applicant take aspirin as a blood thinner?
- How far can the applicant walk on a flat surface before becoming too winded to proceed?
- What-life style habits, including dietary, drinking, and exercise, does the applicant practice?
- What is the date of the last heart-related physician visit?
- Is there a history of congestive heart failure?
- Does the applicant have diabetes? High blood pressure?
- Is there a history of any other vascular diseases (aneurysm, stroke, leg artery disease)?
- What heart related tests (EKG, treadmill, echocardiogram, heart catheterization, and heart scans) have been taken over the prior 3-5 years? Results?
- Some applicants with heart disease keep records of test reports. Are these available for review?

Rating: The great number of variables makes it impossible to provide a precise projection. However, following is a very limited description of the more important underwriting criteria.

Persons having had a heart attack or bypass surgery/angioplasty are postponed within 6 months of initial diagnosis or surgery. This is because of the high frequency of the arteries re clotting for the first 6 months following a cardiac event or following a therapeutic procedure such as surgery or balloon angioplasty.

We are often asked if any person with documented coronary artery disease can expect a standard offer at some future time because of subsequently enjoying unusually good health. Unfortunately, the seriousness of coronary artery disease usually precludes standard, even years after initial diagnosis.

For the first 5 years after a diagnosis of coronary artery disease in a 50 year old or older applicant, the rating guideline is as follows:

Very mild heart attack : Low to medium rating

Moderately severe heart attack: Medium to high rating

Severe heart attack (e.g. was complicated by congestive heart failure): High rating to declination

After the first 5 years or so, the above ratings may be liberalized.

Ratings are highest for those who are less than 40 years and lower in those who are > 65 years old. Persons diagnosed with coronary artery disease before age 30 may not be eligible for even a rated offer.

The most favorable ratings are not available to those with uncorrected risk factors (see the list above). Thus, an upward adjustment is made for those who remain overweight, have elevated blood pressure or elevated lipids. This is especially true for those who continue to smoke. Those who continue to smoke more than 2 packs per day may be declined.

Those with coronary artery diseases who also are insulin dependent diabetics or who have suffered a stroke or TIA (Transient Ischemic Attack) may not be insurable.

The underwriter can give a more meaningful risk assessment if he/she obtains the appropriate APSs before providing your applicant a tentative quote since many other factors are assessed. A cover letter defining the problem using the above questions also enhances our ability to help our clients.

Heart Block (and bundle branch block)

Description: The conduction system in the heart may have "blocks". These findings are seen on the EKG and may be an indication there is underlying heart disease such as coronary artery disease or cardiomyopathy (see the respective sections for details). A "new"

onset of block, within the first 1-2 years is more significant than a long-standing block, five plus years. The EKG may show a complete right bundle branch block (RBBB), incomplete right bundle branch block (RBBB), left bundle branch block (LBBB), incomplete left bundle branch block (LBBB), or hemiblock (anterior or posterior). Each of the heart blocks mentioned has a varying degree of significance.

Questions:

- Does the applicant have any history of right or left bundle branch blocks? If so, when?
- Has the applicant had previous EKGs? If so, when? Can these be obtained?
- Has he/she had any heart-related testing such as echocardiograms or exercise treadmill?
- Has the applicant had any other heart-related conditions or diagnosis?

Rating: The following assumes that the applicant has no known heart disease and he/she does not have too many coronary disease risk factors. For incomplete blocks, no rating is assigned. For hemiblocks, usually no rating is assigned. For a complete right bundle block, a low rating or standard classification may be assigned (depends on other heart disease risk factors). For a newly found complete left bundle branch block, a medium rating may be assigned.

Heart Enlargement

Description: This condition may be found on chest x-ray, echocardiogram (see above), or physical examination. These changes may suggest significant heart or heart/lung disease; however, it may be a normal finding in an athlete. The key to its appraisal is the underlying cause. An ejection fraction that may be part of the echocardiogram report would help define the degree of heart disability (see the echo section for details).

Questions:

- Is there a history of congestive heart failure?
- What are the names and dosages of the applicant's medicines?
- What is the underlying cause of the heart enlargement, i.e. heart failure history, athletic heart, heart valve disease, or heart attack history?
- When was the last follow-up for this condition?
- What heart related testing (e.g. echocardiogram, EKG, exercise treadmill, and heart catheterization) has been done in the past five years and what were the results?

- How far can the applicant walk on a flat surface before becoming too winded to proceed?
- Does the applicant drink any alcohol? If so, how much per day?
- Is there any family history of heart enlargement?

Rating: No rating is assigned if the cause of the heart enlargement is from physical conditioning (an "athletic heart"). If there is mild enlargement and it is due to high blood pressure, a low to medium rating may be applied. A high rating would be assigned for moderate heart enlargement due to heart valve disease. Severe enlargement, especially if there has been bouts of congestive heart failure, would be a declination.

Heart Murmur

Description: A heart murmur represents a sound coming from the heart. This sound is created by the turbulence of the blood flow. Blood flow is usually inaudible, however, if a heart valve is leaking (*insufficiency = regurgitation*) or if it is partially closed (*stenosis*), vibrations are created that become audible. The physical dynamics is analogous to bending a water hose when the faucet is completely opened. One can hear and feel the water flow when the bend creates turbulence of flow. Murmurs may be *functional* ("inorganic", "innocent", "physiologic") which implies no heart valve abnormality or *organic*, an abnormal state. Among the organic murmurs, the most common causes are abnormal heart valves and holes that are present in the walls that separate the heart's chambers. The ones that we are most interested in are:

Heart valves

Mitral insufficiency = mitral regurgitation = valve that leaks

Mitral stenosis = valve that fails to open completely remaining partially closed

Aortic insufficiency = aortic regurgitation = valve that leaks

Aortic stenosis = valve that fails to open completely remaining partially closed

Holes in walls, *septal defects*, separating heart's chambers

Atrial septal defect

Ventricular septal defect

An echocardiogram can see these abnormalities and can assess the extent of the valvular problem. (See the echo section for details.)

Questions:

- How long has the applicant had a heart murmur?

- Has he/she ever had any testing for it (this test is usually an echocardiogram)?
- How far can the applicant walk on a flat surface before becoming too winded to proceed?
- What type of heart condition is present that is the cause of the murmur, e.g. does the applicant have a heart valve related diagnosis? Congenital heart disease? (See that section for details.)
- Has the applicant received any medical or surgical treatment for this condition?
- Has the applicant ever been in congestive heart failure?

Rating: Inorganic ("innocent", "functional", "physiologic") murmurs are standard. Organic murmurs (mitral insufficiency, mitral stenosis, aortic insufficiency, and aortic stenosis) generally have a low to medium rating. The rating is based upon the degree of the valve abnormality and whether complications such as heart enlargement and muscle weakness exist. Generally, the lower ratings become available for the older applicants.

Heart Rate – Normal heart rate is from 60 to 100. Below 60 is called *bradycardia* and above 100 is called *tachycardia*. In and of themselves, neither condition is assigned a rating.

Hepatitis (Viral)

Description: Viral hepatitis is only one of many types of hepatitis. To date, there are several types of hepatitis. They include A, B, C, D, and E (and probably others). There are two phases of hepatitis, "acute" and "chronic". Although death can occur with an acute bout of viral hepatitis, individuals who die from viral hepatitis usually do so because of complications of the chronic phase, *chronic active hepatitis*. Hepatitis B and C are the most important types from an underwriting standpoint.

Hepatitis B – Among US born citizens, relatively few people who get hepatitis B develop chronic Hepatitis B. Hepatitis B testing for antibodies and liver enzymes will determine if one has *Chronic Active Hepatitis B*. This is a serious condition because it often leads to cirrhosis of the liver, which leads to liver failure and or liver cancer. There is treatment, but the cure rate is not great. If the liver fails, liver transplantation is necessary to sustain life.

Hepatitis C - Those who get hepatitis C are likely to progress to chronic hepatitis C. Hepatitis C testing for antibodies and liver enzymes will determine if active disease is present. The liver enzymes may be only marginally elevated or even normal in the presence of active disease. About 70% of individuals, who test positive for the Hepatitis C antibody, will progress to cirrhosis 20 to 30 years after acquiring the Hepatitis C infection. Many develop liver cancer as a

consequence of cirrhosis. Alcohol ingestion and Hepatitis C together make one more susceptible to cirrhosis than either alone. Medical therapy in the form of *interferon alpha* alone or in combination with *ribavirin* may be curative in 30 to 40% of hepatitis C infected people. Liver transplantation may be done in those who progress into liver failure. However, since all of the liver recipients will reinfect their livers with Hepatitis C, the surgery simply "buys" them about 10 extra years of liver survival.

Questions:

- What medications is the applicant taking?
- Is there a history of hepatitis? If so, what type?
- Has the applicant been told that his liver enzymes have been elevated before? If so, when?
- Has the applicant ever had a liver biopsy? If so, when and what were the results?
- Has the applicant ever seen a gastrointestinal or liver specialist?
- Has the applicant ever been treated for Hepatitis B or C? If so, when?
- Was he cured? If so, when and under what type of treatment?
- Does the applicant drink (any) alcohol? If so, what is the amount and frequency?

Rating: No form of acute hepatitis can be accepted. Three months after full recovery, Hepatitis A and E are generally standard. Hepatitis B can be considered one year after full recovery. Hepatitis C cannot be considered for two years after full recovery. Recovery must be fully documented in the applicant's medical record. As a rule, if the liver enzymes are elevated and there is either chronic hepatitis c or chronic active Hepatitis b, the proposed insured is not likely to be insurable.

Herpes Simplex - Cold sores, fever blisters, genital herpes are different forms of herpes. A standard classification can be expected after fully recovered or controlled, unless there is a history of other sexually transmitted disease or sexual promiscuity.

Herpes Zoster - Shingles. Standard after fully recovered.

Hiatal Hernia – This is a minor gastrointestinal condition that may be responsible for the common symptom of reflux. If there are no complications of bleeding, severe symptoms, severe *esophagitis* (inflamed lining of the esophagus), no evidence of *Barrett's Esophagus* (may be a pre-cancerous condition), and no planned surgery for the condition, a standard classification should be expected.

Hodgkin's Disease

Description: Hodgkin's is a cancerous disease of the lymph gland system. It is caused by malignant transformation of normal cells to the diagnostic *Reed-Sternberg cells* which is recognizable under the microscope. The disease spreads to the adjacent lymph gland tissue, and eventually to other organs. Some types of Hodgkin's disease include: nodular sclerosis (most common), mixed cellularity (2nd most common), lymphocyte depletion, and lymphocyte predominance. Each has a different prognosis. In general, the prognosis is better in children and young adults, and it is worse in people older than 60. The older age individuals often present with advanced disease and other medical problems that make medical management of the disease difficult. The outcome of Hodgkin's Disease is more unfavorable, especially in the individual with advanced disease, when there is fever, drenching night sweats, unexplained weight loss within the preceding 6 months, and male gender. A large tumor mass carries a poor prognosis. To underwrite this impairment, all biopsy reports are needed.

Questions:

- When was the Hodgkin's diagnosed?
- What was the stage and type of Hodgkin's?
- When did treatment (last cycle of chemotherapy and last dose of radiation) end?
- Has there ever been any recurrence? If so, when?
- When was the last medical evaluation for Hodgkin's?
- Where can Hodgkin's related clinical information and biopsy reports be obtained?

Rating: Modern therapeutic developments have produced very impressive cure rates for all stages of this disease. Ratings can often be assessed 1-2 years after diagnosis.

Hyaline Membrane Disease

Description: This is a serious disorder of premature birth that results in breathing distress. It is the result of a deficiency of necessary *surfactant* (a type of protein) in the lung at birth, which causes parts of the lungs to collapse. Risk factors of Hyaline membrane disease are premature infants born prior to 37 weeks gestation, infants born of diabetic mothers, and multiple births. With greater prematurity, the condition is more severe and more common. The outcome is dependent upon the quality of care. A successful outcome in children older than 28 weeks gestation is likely if treated at a pediatric medical referral center. Unfortunately, the long-term consequence after prolonged artificial ventilation (breathing machine) and severe disease may be chronic lung disease.

Rating: The child would be uninsurable until the age of 5-10 depending on the degree, the gestational age, and the difficulty in treating the child at the time of birth. When the underwriting is done, the applicant's classification would be contingent upon the degree of residual lung disease.

Hyperthyroidism – This is an over-active thyroid. Until it is treated, the applicant must be postponed. If successfully treated (the thyroid level is normal), and there are no complications, there is no extra rating.

Hypothyroidism – If there are no complications, and the treatment of thyroid replacement is successful, no extra rating is necessary.

Hysterectomy is the surgical removal of the uterus. If the pathology report shows no cancer, and there have been no complications, no extra rating is necessary.

Kidney Dialysis – This is an artificial kidney machine. It is used by an individual if he/she is in kidney failure. Often, the kidney failure is chronic and irreversible. There are some situations when the kidney failure is acute and reversible. One example may be of acute kidney failure is as a result of a medicine that is toxic to the kidneys. After the individual has been supported for a week or two by kidney dialysis, the kidneys may resume normal or near normal function. Thus, if the kidney function returns to normal, and the applicant remains stable for 6-12 months, a standard rating may be issued. If the applicant is being treated for chronic kidney failure, he would be uninsurable. Full medical records must be obtained in order to consider the application for life insurance.

Kidney, "Single" – This may be the result of a congenital condition, as a result of trauma, or as a result of becoming a kidney donor. If the other kidney is healthy, and there are no other impairments of the urinary system or cardiovascular system, a standard rating could be anticipated.

Kidney Stones – Some people have metabolic problems, which results in the formation of stones in their urinary tracts. The stones may pass on its own or it has to be removed or it remains in the kidney. If there is a normal kidney function (the kidney function blood tests are normal), absence of infection, no symptoms, and stones are not lodged in the kidneys or ureters, a rating is generally not necessary.

Kidney Transplant

Description: Kidney transplantation offers individuals who have been on dialysis a lifestyle closest to normal and may lead to improved better survival. The most common diseases that result in patients having transplantation are (1) diabetes mellitus with kidney failure, (2) kidney disease caused by high blood pressure, and (3) *glomerulonephritis* (a form of nephritis). These three causes of *end*

stage renal disease (ESRD) account for nearly 75% of those on transplantation lists. The source of most human kidney transplants are *cadaveric* donors (donors who have died but whose kidneys are still viable). The other source is a living person, ideally, a close family relative. Finding a good *HLA* match is more difficult from cadavers than from blood relatives. Tissue-typing laboratories perform the very important *crossmatch* test before all kidney transplant operations for both living-related transplantation and cadaveric transplantation. Technicians incubate white cells from the potential donor (living-related or cadaveric) with serum from the potential recipient. If the serum of the recipient destroys the membranes of the white cells of the potential donor, the laboratory reports the test as positive. The surgeon usually cancels the transplant operation if the crossmatch is positive, because a positive result predicts nearly immediate and severe graft (new kidney) rejection if the transplant is done. *Immunosuppression* (medicines that prevent the body's normal defense mechanism from destroying "foreign bodies", in this case, a foreign kidney) after transplantation is essential for preventing the new kidney's rejection. A variety of immunosuppressive regimens have been used. The choice of immunosuppressive therapy depends, in part, on the type of transplant (i.e., cadaver versus living related donor) being used. The most frequently used regimens use a combination of prednisone and either cyclosporin A or azathioprine, or all three agents. Though cyclosporin A improves graft survival, it may damage the kidneys (because of its toxicity) and may cause irreversible lung disease. Other adverse effects of cyclosporin are high blood pressure, high potassium, predisposition to lymph gland related malignancy, tremor, seizure, and liver toxicity. Coronary artery disease is a very likely co-existing disease among kidney recipients.

Questions:

- Why was a kidney transplant done? When was it done? Where was it done (name of institution)?
- Was the kidney transplant from a cadaver or living donor? If the donor was living, was it from a relative? If so, what type of relative (brother, parent, etc.)?
- Has there been any organ rejections? If so how many? When was the last rejection?
- Have there been any complications of the surgery? Have there been any side effects to any of the immunosuppressive drugs?

Rating: The rating for kidney transplantation is possible after one year, or possibly a little earlier if the kidney is from an identical twin. Expect a high substandard offer generally, for favorable situations. Ages over 60 may have lesser ratings. The rating can be lower if an identical twin involved. A rated policy assumes good follow-up, good patient compliance, the absence of diabetes and coronary artery disease, and the absence of complications due to the transplant or medications.

Leukemia is the proliferation and accumulation of abnormal immature blood cell *blasts* in the bone marrow and other tissues. This causes marrow failure. Common causes of death are bleeding and infections. Leukemia is classified according to the type of the immature white cell types in the bone marrow, *blasts*, and according to the course, if untreated:

Acute lymphoblastic leukemia (ALL)

Acute nonlymphoblastic leukemia (ANLL)

Chronic myelocytic leukemia (CML)

Chronic lymphocytic leukemia (CLL)

Questions:

- When was the leukemia first diagnosed?
- What type of leukemia (see classification above) was diagnosed?
- Did the treatment include a bone marrow transplant?
- When was the last treatment given?
- What complications of the leukemia has the applicant experienced?
- When was the last physician visit that was related to the leukemia?
- What are the names of all the medicines being taken?
- Where can the most complete medical records that cover the leukemia history be found?

Ratings: The applicant cannot be considered any sooner than 5 years after the last treatment for leukemia, nor within 5 years of a bone marrow transplant. Expect a highly substandard, if insurable.

Systemic Lupus Erythematosus (SLE) is a chronic inflammatory disease of unknown cause affecting the skin, joints, kidneys, nervous system, heart, and lungs. It is characterized by *autoimmune* phenomena, the body making antibodies to itself resulting in self-destruction of certain areas of the body. *L.E. cells* and *antinuclear antibodies (ANA)* are blood tests that help diagnose this disease. Females, usually from 20 to 40 years of age, are more commonly affected than males. Symptoms include fever, fatigue, weight loss, joint pain, a facial ("butterfly") rash, fluid in the lung space, anemia, inflammation of the lining of the heart (*pericarditis*), kidney disease (*nephritis*), and psychosis. The course of the disease is one of remissions and relapses. Treatment includes steroids and immunosuppressive medications (medicines that prevent the body's normal defense mechanism from destroying what is incorrectly

perceived to be a "foreign bodies"). In SLE, the "foreign body" may be the kidneys, heart lining, joints, or brain. A common cause of death is kidney failure.

Questions:

- When was systemic lupus erythematosus diagnosed?
- Are there any organs involved in addition to the joint disease?
- Is the applicant taking Prednisone? If so, how long has he/she been taking it and at what dose?
- What are the names of the medicines the applicant is currently taking?
- Does the applicant have any heart disease, high blood pressure, kidney problems including spilling protein?
- When did his/her physician last see the applicant?
- What type of physician follows the applicant (internist, rheumatologist (joint specialist), etc.)?
- In what areas is the applicant limited? Is the applicant able to work or go to school?
- Who has the medical records that discuss SLE?

Rating: Assuming that the diagnosis is clearly established, and the disease is mild with:

- minimal involvement,
- no worse than low to moderate anemia (Hemoglobin >10.0 grams),
- minimal loss of protein in the urine (proteinuria) (<50 mg% or <1+ or non-ratable protein/creatinine ratio),
- no other kidney disease,
- infrequent episodes of inflamed heart lining (pericarditis) or inflamed lung lining (pleurisy),
- no cerebral (brain) involvement, no psychiatric problems,
- use of no more than a small dose of Prednisone, and
- the disease is under good control.

Then use the following guide:

DURATION SINCE Diagnosis	CURRENT AGE		
	0 – 19 YEARS	20 – 49 YEARS	50 UP
0 – 2 years	Decline	Decline	Decline
2 – 5 years or unknown duration	Decline	High	High
5 – 10 years	Decline	High	Medium
10 up years	Decline	Medium	Low

Liver Enzymes

Elevations of one or more of the liver enzymes may be seen on a random blood profile. At times, the information on the application, medical, APS, and inspection will not explain these findings.

Unexplained elevation of liver enzymes [*AST (SGOT), ALT (SGPT), GGT, Alkaline Phosphates (Alk Phos)*], as well as abnormalities of the liver function tests (*bilirubin, albumin*) can be indicative of liver and/or gallbladder disorders. In conditions which damage or destroy liver cells (e.g., hepatitis B), the AST (SGOT), and the ALT (SGPT) will usually become very elevated as these enzymes are released into the bloodstream.

An isolated elevation of *GGTP* does not necessarily indicate cell damage. The liver is responsible for metabolizing drugs and chemicals to which it is exposed. It performs this function normally as long as the metabolic pathway is not overloaded. *GGTP* is a marker for that pathway, and it becomes elevated as the liver boosts its metabolic response to ongoing exposure (e.g., the anti-seizure drug, Dilantin or alcohol). Chronic, marked, or multiple elevations of all the enzymes will usually be followed clinically, yet a diagnosis still may not be established. Assessing the applicant's history, lab work, and occasionally a liver biopsy report will allow a more competitive rating. However, postponement (pending MD evaluation) may be to the applicant's advantage when the later medical evaluation of the abnormal lab shows insignificant disease.

Some disorders that cause abnormal liver enzymes are:

- Alcohol abuse
- Fatty changes in the liver
- Hepatitis (B,C)

- Medications (note that the lowest dose of the cholesterol medications rarely increase liver enzymes)
- Hemochromatosis (too much iron is deposited in the liver)
- Liver cancer
- Ulcerative colitis

Questions:

- Has the applicant had a history of liver enzyme elevation in the past? If so, when was this condition first noticed?
- Has the applicant been tested by :
 - Ultrasound of liver?
 - CAT scan of liver?
 - Liver biopsy?
 - Blood tests for hepatitis? For hemochromatosis?
- What were the results of any of these tests and when were the tests done?
- Does the applicant drink alcohol? If so, what? What is the amount per day?
- When was the applicant last seen by his physician for a problem related to elevation of liver enzymes?

Rating: Depending upon the number of enzymes that are elevated, the extent of elevation, and other clinical data, the rating is highly variable. One may expect anywhere from a standard to decline. Very minor elevations in 1 or 2 enzymes often will not prevent a standard offer. In an attempt to offer the most competitive rating, we often return the lab work with comments about the liver elevation and a suggestion that the results be shared with the physician. If the applicant sees his/her physician, and he/she adequately addresses this issue, the underwriting staff is in a much better position to offer a more competitive classification. If we are asked to reconsider a previous rated offer because the applicant did see his/her physician, we need to see both the office visit notes and any pertinent testing that pertain to this problem.

Meningitis is an inflammatory response to bacterial or viral infection of the spinal cord and brain covering and its fluid and the fluid of the ventricles of the brain. Neonates, infants, and geriatric aged individuals are at the highest risk of developing this disorder.

Questions:

- When was the meningitis? When was the last treatment?

- Were there any complications or sequelae of meningitis?
- What was the cause of meningitis?
- Have there been any recurrences of meningitis? If so, when?

Rating: If there is no impairment or residual disorder for viral and bacterial meningitis, at ages 0-6 months, postpone; at ages 6 years and up, standard can be expected.

Mononucleosis is a viral infection. If there are no complications such as hepatitis and recovery is full, no rating is necessary.

Multiple Sclerosis (MS)

Description: Multiple sclerosis is a long-term chronic disease of the central nervous system. In MS, destruction of the myelin sheath (an insulation-like covering) of the nerve fibers occurs. This results in damaged areas called plaques. They are commonly seen on a MRI (Magnetic Resonance Scan). Besides the number of plaques, other factors may have an even greater effect on disability. Disability is the key factor to underwriting MS. The degree of disability at any point in time during a stable period of disease is a good indicator of future survival. Second in importance is the course the MS follows (see below). Other risk factors that affect survival are age at onset, amount of time between first attack and second, multiple system involvement, gender, initial symptoms, and support system. Ongoing symptoms can also be clues to longevity. Psychiatric and urinary symptoms occurring within the first 10 years of disease tend to correlate with poorer survival rates. Time lapse between first attack and second attack is important. If the interval was greater than one year, life expectancy is increased.

DEGREE OF IMPAIRMENT

DEGREE OF IMPAIRMENT	ACTIVITIES OF DAILY LIVING	MUSCLE WEAKNESS	PHYSICAL ACTIVITY (STANDING, CLIMBING)	SELF-CARE (DRESSING, EATING, BATHING)	BLADDER AND BOWEL FUNCTION	SWALLOWING, BREATHING, AND SPEAKING
MILD	Almost completely independent	Muscle strength almost normal. May not be able to pull or push against resistance from an examiner	Able to do with little difficulty	No assistance needed	Very little impairment	No problems

MODERATE	Mildly dependent upon others for help	Can pull or resist against the force of gravity, but not against modest efforts of the examiner	Able only to walk a short distance or needs a brace or cane or someone's help in order to get around	Some assistance of others needed	Partial loss of control of bladder or bowel control	Minor impairment
SEVERE	Almost completely dependent on others for most activities	Severe muscular weakness; unable to raise limb against the force of gravity	Unable to walk; confined to wheelchair or bed	Cannot perform. Total supervision of others needed for all feedings and hygienic care	No control of bowel and bladder function	Serious difficulty

MS takes several possible courses:

- Benign
 - In about 20 - 30% of MS patients the disease is considered benign.
 - This prognosis generally requires 10 years with little or no disability.
 - For insurance purposes, a five-year interval with little or no disability is a good indicator of future benign course.
- Relapsing-remitting (RRMS)

Most common course

- Periodic attacks or exacerbations, with interim periods of remission
- Common presenting symptoms are eyes and sensory. Other symptoms may be fatigue, pain, motor weakness, spasticity, tremor, ataxia (problems walking), sexual dysfunction, depression, vertigo, and bowel and bladder dysfunction.
- Primary progressive (PPMS)
 - Second most common course- 15% of MS cases

- Begins with a slow progression of symptoms and continually follows a disabling course.
- A six month period with no remission is generally required for the label of progressive.
- A high proportion of patients with disease (onset over age 40) has a progressive course.
- A progressive course is associated with poorer survival.
- Secondary progressive
 - About 50% of MS patients become SPMS within 10 years of initial diagnosis of MS as do 90% within 25 years of initial presentation
 - A progressive course is associated with poorer survival
 - Progressive-relapsing
 - RRMS can turn into a progressive state later in the disease, and is thus labeled secondary progressive (SPMS) or progressive-relapsing (PRMS)
 - RRMS also means a progressive form with superimposed relapses. It is associated with a poor survival

Other Prognostic Factors

In general, females fare better than males.

Younger age onset carries a better prognosis.

Significantly more disability is associated with onset at or over age 40 due to increased expected mortality.

Older-age onset is more likely to be of the primary progressive form or to become progressive more quickly.

Disability is worse in older patients with a primary progressive course MS

The pattern and type of symptoms help define how well the applicant does in the future.

Favorable long term survival occurs with:

optic neuritis (inflammation of the main nerve that inserts in the back of the eye ball)

sensory symptoms (numbness and tingling), and single brainstem lesion (only one area is involved with MS and this is the upper most portion of the spinal cord).

an abrupt onset of the MS attack as opposed to a gradual onset.

complete or near complete remission after the first attack.

symptoms from only one region of the central nervous system.

good degree of remission from last bout.

only minimal disability.

low number of affected functional systems.

Unfavorable courses are associated with:

cerebellar (movement of limb is not coordinated or impairment of balance),

slow onset of motor deficit or motor syndrome,

limb weakness

vertigo

speech problems (phonation)

inability to swallow

Questions:

- What type of MS does the applicant have?
- What medicines is the applicant on?
- How old was the applicant when symptoms of multiple sclerosis first began?
- How many attacks has the applicant had over the past five to ten years? When was the last attack?
- What are the typical symptoms of most attacks? [dizziness, problems walking due to coordination problems, balance problems, numbness/tingling of extremity (s), bladder/bowel problems, swallowing problems]
- Between attacks, what type of neurologic deficit or disability (gait, coordination, sensory, speech, visual, and swallowing problems) does the applicant have? How noticeable is it?
- If leg weakness is a problem, can the applicant transfer him/herself from the bed to a chair?
- Does the applicant use a walker or similar device? Motorized chair? Confined to bed?
- Describe the applicant's support system. Does the applicant employ health care personnel? If so, how much of the day are they necessary?

- Does the applicant work outside the house and/or attend school?
- Has the applicant been hospitalized in the past five years? If so, why?
- Does the applicant have depression?
- Based upon your observations, how would you classify the extent of your client's MS using the chart above (mild, moderate or severe)?

Rating: The applicant would be postponed within one year of original diagnosis. Assuming the applicant is on no steroids (e.g. Prednisone), the following apply. If the degree of impairment is mild, and other favorable factors exist, a medium rating might be anticipated within one to five years of the original diagnosis; from about 5 to 10 years, a low to standard rating, and beyond 10 years, a standard rating. Multiple episodes call for a medium to high ratings. With severe symptoms/disability from MS, more than minor neurologic residual, and a chronic, progressive course, the case would be declined.

Overweight - Elevated blood pressure, diabetes, poor family history, and lipid elevations carry added significance for the overweight applicant. (See the weight chart for rating details.)

Pacemaker - If one's heart rate is too low, a pacemaker becomes necessary to prevent too low of a heart rate. There are several types, but they all function to insure that the heart rate does not drop below a certain point. Some of the newer ones also have a built-in automatic defibrillator. This allows the pacemaker unit to detect lethal rhythm problems and supply a shock to treat them. Often, fairly significant heart disease is the underlying reasons that necessitates a pacemaker.

Questions:

- Why was a pacemaker inserted?
- When was the pacemaker inserted?
- Does the pacemaker unit also include an automatic defibrillator?
- What medicines is the applicant taking?
- Is there any:
 - heart enlargement?
 - coronary artery disease?
 - history of congestive heart failure?
 - atrial fibrillation?

Is there any:

- When was the last physician visit that included an evaluation of the heart?
- How often is the applicant checked for his pacemaker?
- Has there been any complications or malfunctioning of the pacemaker?

Rating:

If the applicant has a pacemaker for complete heart block (cause unknown), no heart enlargement, no coronary artery disease, no history of congestive heart failure, no atrial fibrillation, and good pacemaker follow-up, use this rating guide.		
Time since pacemaker* placed	AGE AT PACEMAKER* PLACEMENT	
	Age 1 – 39	Age 40 – up
0 to 11 months	Decline	Postpone
12 mo. up to 3 years	Decline	Medium
3-5 years up	Decline	Low
* Does not have an automatic defibrillator		

Pancreatitis (Acute) - Single attack, standard after 6 months. Multiple attacks require one year before offering a low to medium table rating. Chronic pancreatitis (more than 4 attacks) is in the medium to high to decline. Alcohol abuse, as the cause, is a declination.

Panic Attacks

Description: This is a specific type of anxiety. It is often accompanied by different phobias, such as fear of bridges or high places. Like anxiety, symptoms include fear (impending doom), apprehension, rapid heart rate, chest tightness, and shortness of breath. This disorder is associated with a higher incidence of suicide, especially if depression is part of the picture.

Questions:

- What medications is the applicant taking (prescribed and over the counter)?
- How is the condition treated?
- Does the applicant drink (any) alcohol?

- Has he/she been hospitalized because of any emotional or chemical dependency problem?
- Is a therapist (MD or Ph.D. or M.S.W. (Social Worker)) treating the applicant? If so, who? How long? How frequent?
- How does the applicant function at home and work?

Rating: As a lone impairment, in the absence of depression or other psychiatric problem, a low rating may be applied. Waiver is not generally offered.

Paraplegia

Description: Paraplegia means paralysis of the legs and lower part of the body. In the young population, spinal injury is a common cause of this condition. After proper rehabilitation, they are largely self-sufficient being able to get around in a wheelchair.

The mortality rate is highest in those with complete lesions, particularly *tetraplegia (quadriplegia)*, paralysis of all four limbs, as from a spinal cord accident in the neck area or stroke.

Deaths from suicide is high.

Bladder function is always impaired. The related problems are complete retention (not being able to void), dribbling, incontinence, and frequent urination. However, they may have only a few bladder infections if they are careful.

Large bowel and rectal function may be lost permanently.

Sexual function is impaired.

Long-term survival depends on the level and extent of the spinal cord injury, the age of the applicant, and the availability of special treatment units.

Questions:

- When did the applicant develop leg (or arm) weakness?
- How did it happen?
- What neuromuscular deficits, e.g. bowel or bladder dysfunction, coordination problems, gait problems, and spasticity does the applicant have?
- What medicines is the applicant on?
- Describe the applicant's support system.
- Does the applicant have depression?
- Does the applicant drink alcohol?

- Does the applicant work outside the house and/or attend school?
- What part of personal care is the applicant dependent upon others?
- Does the applicant transfer himself from the bed to a chair or from a wheelchair to a car?
- Does the applicant have a permanent bladder catheter?
- Has the applicant been hospitalized in the past five years? If so, why?
- How many bladder infections has the applicant had over the past three years?

Rating:

Ages 0 – 19: usually declined

Ages 20 and up: 0 – 1 year since onset : postpone; 1 year and up:
Favorable outcome: Low to medium

Good adjustment

No suicide attempts

Only weak and not totally paralyzed

No repeated infection (kidney, respiratory tract, skin)

Good support system

Minimal bladder or bowel dysfunction

Less favorable: High rating or declination

Total paralysis, or

Marked bowel or bladder problems

Bed sores

Other (frequent infections, not too well adjusted, other chronic medical problems)

Parkinson's Disease

An adult-onset neurodegenerative disorder characterized by a combination of tremor at rest, rigidity, and slow movement. This is the only neurodegenerative disease which is treatable long-term.

Mild disease: little or no progression, no significant interference with daily activities

Moderate disease: slowly progressing over many years; no more than mild depression

Severe: Rapidly progressive over months or several years; depression that is significant; dementia, recurrent pneumonia

Questions

- When was the Parkinson's first diagnosed?
- What medicines is the applicant taking?
- What are the applicant's limitations due to Parkinson's?
- Does the applicant work?
- Does the applicant have depression?
- Does the applicant have significant memory loss? Are there problems with the applicant's judgment in work or social situations?
- Has the applicant fallen over the past 12 months? If so, how many times?
- What support does he/she have (care giver)?

Rating:

Age to 29: Decline

Ages 30 – 49: High rating or declination

Ages 50 - 64

Mild disease: Low rating

Moderate disease: Medium rating

Severe disease: Decline

Ages 65 up

Mild: Standard

Moderate: Low - Medium

Severe: High to decline

Peptic Ulcer

A chronic ulcer in the lining of the gastrointestinal tract. The Duodenal Ulcer (DU) is the most common form of peptic ulcers. Gastric (stomach) Ulcers (GU) are less common than Duodenal Ulcers. Arthritis medicines such as Ibuprofen, a type of "NSAID", are a

common cause of Gastric Ulcers. Complications of ulcers are bleeding, recurrence of ulcer disease (almost anyone who smokes will have recurrence of ulcers), stomach obstruction, and perforation of the stomach.

Questions

- Does the applicant take any stomach ulcer medications? Any arthritis medicines? What other medicines does the applicant take?
- Has the applicant been hospitalized because of a gastrointestinal problem? If so, what? When?
- How many acute episodes of ulcers has the applicant had in the past ten years?
- Does the applicant smoke?
- Does the applicant drink alcohol? If so, how many drinks per day?
- Has the applicant had any gastrointestinal operations or procedures (e.g. upper endoscopy)? If so, when? Results?
- Has the applicant had any gastrointestinal bleeding, obstruction, or gastric perforation (rupture of stomach)?

Rating: If there are no complications (bleeding, obstruction, and perforation), and the applicant responds favorably to therapy, it is usually standard. A low rating may be added if the applicant uses one of the "non-steroids" or "NSAIDs" which are arthritis pills that can cause ulcers or if she/he smokes. If the applicant is planning to have an endoscopy (when a biopsy would be done) or if she/he is having surgery in the near future, the case would be postponed, pending the outcome of these procedures.

Pregnancy

If there are no problems during pregnancy, and there has been no history of pregnancy-related problems, the applicant should be standard. She could be postponed if prior pregnancy involved Pre-eclampsia. This condition is hypertension associated with proteinuria, edema, and sudden weight gain developing during pregnancy after 20 weeks gestation. Other complications of pregnancy such as diabetes, heart failure, asthma, and blood clotting problems are other potential causes for postponement.

Quadriplegia

This is paralysis of all four extremities. See the section on Paraplegia. These applicants cannot be insured.

Renal Failure

The kidneys no longer function due to progressive disease. The individual who is supported by renal dialysis is uninsurable.

Rheumatoid Arthritis

A chronic *systemic inflammatory disease* with a predilection of *the medium size joints*. Joint inflammation may be remitting, but if continued, usually results in joint damage and disability. Other organ systems may be involved including rheumatoid nodules, inflammation of the arteries (arteritis), neuropathy, eye involvement, inflammation of the lining of the heart, and enlarged spleen. Recurrent flare-ups show inflamed (hot, red, swollen, tender) joints. Women tend to have a higher mortality risk than men. Treatment varies depending on the severity of the disease. The medicines used to treat Rheumatoid Arthritis include anti-inflammatory agents (aspirin, ibuprofen, steroids), gold, penicillamine, and immunosuppressive agents (e.g. methotrexate).

DEGREE OF IMPAIRMENT	ACTIVITIES OF DAILY LIVING	PHYSICAL ACTIVITY	SELF-CARE	TREATMENT	DISEASE ACTIVITY
MINIMAL	No interference	Normal	Normal	All types except penicillamine, steroids, immunosuppressants	Inactive or low grade. Not progressive. Low grade, few joints.
MILD	Slight interference	Slight limitations	Normal	All types except penicillamine, steroids, immunosuppressants	Continuous low grade, but not progressive
MODERATE	Significant interference	Able to walk only short distances; rely on brace or cane	Some dependency upon others is necessary	Continuous oral steroids or immunosuppressants	Slowly progressive. Anemia, inflamed joints
SEVERE	Severe interference	Wheelchair or bed bound	Totally dependent upon others is necessary	Continuous oral steroids or immunosuppressants	Rapidly progressive, very deforming

Questions:

- When was rheumatoid arthritis diagnosed?

- What are the names and dosages of the applicant's medication?
- Has the applicant ever had any complication of any arthritis medicine, such as gastrointestinal bleeding?
- What physical limitations are necessary due to arthritis?
- Are there any complications, e.g. heart or lung involvement?
- Is walking normal or does the applicant need a cane or wheel chair?
- Is a health care giver needed? If so, how often and how long?
- Does the applicant work or attend school?

Rating:

If no RA complications, such as rheumatoid lung disease, RA related kidney disease, medication related complications, you may refer to the following rating guide:

Degree of symptoms Rating

Minimal disease: Standard

Mild disease: Low

Moderate disease: Medium to high

Severe disease: Decline

Schizophrenia is a major psychiatric illness. The individual is out of touch with reality. The disorder is characterized by delusions, hallucinations, disturbed emotion, and impaired thinking. It lasts at least six months

Questions

- When was schizophrenia first diagnosed?
- What are the names and dosages of the medications?
- How many times has the applicant been hospitalized for a psychiatric reason? When was the last?
- Does the applicant have any drug or alcohol abuse history? Does the applicant drink alcohol? If so, how much and how often?
- Does the applicant have depression?
- Does the applicant have any other medical problem?
- What limitations does schizophrenia cause?
- Does the applicant work or attend school?

- How good is the control of schizophrenia? Good, fair, or poor?

Rating: Not insurable the first year following diagnosis. Ratable for 5 years, with possible standard thereafter for the very best cases. Most often, those with this disorder are highly rated. Those suffering multiple episodes and frequent periods of disability are uninsurable.

If effective control:

0 – 1 year : Postpone

1 – 2 years or duration unknown: High rating

2 – 5 years : Medium to high

5 up : Low to medium

Sleep Apnea - Apnea refers to a cessation of airflow lasting at least 10 seconds. Often, this diagnosis is made after an overnight evaluation at a certified Sleep Disorder Center. Depending on a variety of factors, underwriting handling can range from standard to uninsurable. In general, those under age 50 are more often standard, with the likelihood of a rating growing with age. Treatment options include weight loss, avoidance of alcohol, and sedatives, surgical intervention (uvulopalatopharyngioplasty, tracheostomy), and various forms of forced airway pressure (most commonly Continuous Positive Airway Pressure [CPAP]) to be used while asleep.

Questions:

- When was sleep apnea diagnosed?
- What type is it? Central or obstructive sleep apnea?
- How is it being treated?
- If CPAP is used, how much is it used? Daily? 3-4 days a week? Weekly? Not using it now?
- What medicines are used?
- What other medical problems does the applicant have?
- Were initial sleep studies done? When? When were follow up studies done?
- What other medical conditions does the applicant have?
- Rating of obstructive sleep apnea
- Unoperated, no complicating medical problems
- Sleep study showing results that are normal or mildly abnormal: Standard
- Sleep study showing results that are moderately abnormal

Untreated:

Age is less than 50 years: High to Decline

Age is greater than 50 years: Medium to High

Sleep study showing results that are very abnormal: Decline

Operated, no complications

No follow-up sleep study: Low or standard (depends what factors are known)

Follow-up sleep study that is almost normal: Standard

Follow-up sleep study that is abnormal: Variable

Nasal continuous positive airway pressure device (N-CPAP) treatment

0 – 6 months since starting N-CPAP: Postpone

6 – 12 months since starting N-CPAP: Medium to High

1- 2 years since starting N-CPAP: Low

2 years and up since starting N-CPAP: Standard

Stress Electrocardiography - This is the most widely used test for detecting Coronary Artery Disease. It involves stationary walking on a treadmill, or less commonly, pedaling a bicycle. During rest, exercise, and recovery EKGs are taken. Although stress electrocardiography is often done as a screening test for someone with coronary risk factors, especially if he/she is to embark on an exercise program, it should not be assumed that it was done as a "routine test". If it is not normal, it may be followed by more extensive cardiac testing, e.g., thallium scan, a MUGA procedure, a stress echo, and/or heart catheterization.

The exercise treadmill indicates whether there are EKG changes suggestive of coronary artery blockage. Other information that the test gives includes exercise tolerance (how long the applicant is able to stay on the treadmill) blood pressure and heart rate responses to exercise. Positive or negative results must be correlated with the applicant's coronary risk factors and whether he had chest pain as the reason for the examination. Thus, risk classification is based upon the results of this test plus the applicant's coronary risk factors, e.g., the applicant's pretest probability of having coronary disease. This could translate to a classification anywhere between standard and decline.

Stroke - See Cerebrovascular Accident.

Suicide Attempt - Most suicide attempts are associated with an underlying psychiatric problem; thus, the assessment will be based upon that problem.

Questions:

- If the applicant has depression, for how long?
- What are the names and doses of his/her medications?
- Is there a family history of suicide attempts or depression?
- When was the applicant's first attempt to commit suicide? By what means? How many attempts have there been since then? When was the last attempt?
- Is there a history of alcohol or drug abuse?
- Have there been any psychiatric hospitalizations? If so, when and where? When was the last?
- What is the name and address of the physician who has the most complete medical records covering this problem?

Rating: Coverage is not available within one year of a suicide attempt. A medium rating may be assessed after one year, if the residual depression is mild, and a psychiatrist has concluded the suicidal ideation (thoughts) no longer exists. After five years of stability and adequate psychiatric follow-up, the applicant might be standard. More than one suicide attempt is usually uninsurable.

Syphilis -Uninsurable if present. A single episode of most forms is standard after full recovery has been documented in the medical records. Underwriting will look for evidence of other sexually transmitted diseases. Certain types of syphilis, including recurrent episodes of syphilis, could warrant declination.

Transient Ischemic Attack (TIA)

Description: These are a group of symptoms that suggest an impending stroke (see stroke above). The classic symptoms are facial weakness, arm and /or leg weakness on the other side of the body and slurred speech. The episode lasts for less than 24 to 48 hours. There should be no residual neurological deficit and there should be no abnormalities of a head CT or MRI scan due to it. As a warning symptom, the TIA is to the brain as angina is to the heart. The mortality of angina and TIA is about the same. Often, blood thinners such as Aspirin, Ticlid or Coumadin may be started. The likelihood of sustaining a stroke within 6 months of the TIA is very high. Also, the likelihood of coexisting coronary artery disease is very high even if the applicant has no symptoms related to heart disease. The most important risk factor to control (see risk factor section) to prevent another episode of TIA or stroke is *systolic* (top number of the equation) blood pressure. The systolic pressure should be less than 135mmHg.

Questions:

- When was the first TIA?

- How was it treated? What blood thinner is being used, if any? What are the names and dosages of all of the applicant's medications?
- Has the applicant had heart testing such as an exercise treadmill or echocardiogram. When? Results?
- Does the applicant smoke?
- How many strokes has he/she suffered? Was the applicant hospitalized?
- Since the initial TIA, has the applicant has subsequent TIAs or strokes? If so, when?
- Does the applicant have high blood pressure? If so, what is his/her usual blood pressure?
- What is the name and address of the physician who has the most complete medical records covering this medical problem?

Rating: A 6-month postponement must follow an episode of a transient ischemic attack. After one year of having no recurrences of a TIA or occurrence of a stroke, a low rating for about 3–4 years is assessed. After 4–5 years, a standard rate could be offered if there has been no recurrence of TIAs or occurrence of a stroke or onset of coronary artery disease. The presence or absence of coronary risk factors and the results of cardiac testing could influence these ratings.

Tuberculosis (TB)

Description: This is a bacterial infection that usually infects the lungs, but it may also infect virtually any other organ. Those most susceptible to TB are the very young, the elderly, those with chronic lung disease, those with malignancy, and those with AIDS. Until about 1985, the disease was easy to treat and was uncommon in the United States. Since then, many changes have occurred including a decline in public health efforts, an increase in poverty, homelessness, drug or alcohol abuse, immigration from countries where tuberculosis is common, the HIV epidemic, and multidrug resistance of the organism. More difficult to treat *Atypical strains* (unusual strains) have emerged since 1985. Thus the disease has become much more common and more difficult to eradicate. Rather than using only one drug to treat TB, 2 to 4 drugs are often necessary to adequately treat individuals with the disease.

Questions:

- When was Tuberculosis first diagnosed? Was it in the lungs only or in other organs?
- Were there any underlying medical problems such as chronic lung disease, alcoholism, or cancer?
- Did the applicant have surgery for TB? Medication?

- If treatment was medicinal, how many months did the applicant receive therapy? When was therapy completed?
- When was the last follow-up medical visit for this condition?
- How can records that cover this condition be obtained?

Rating: Expect a standard rating after an uncomplicated TB has been successfully treated. This assumes that the patient's compliance taking his medication and his follow-up were good. Atypical strains, drug resistant strains, immune-compromised (unable to fight infections normally) individuals account for cases that may be substandard or declined.

Ulcerative Colitis

Description: *Inflammatory bowel diseases* include *Crohn's Disease* and *Ulcerative colitis*. Ulcerative colitis is of unknown cause characterized by intermittent bouts of inflammation of all or portions of the colon. Recurrences of rectal bleeding, diarrhea, and a variety of constitutional symptoms such as fatigue, loss of appetite, and weight loss are common symptoms. Other than the bowel, there are other organs that may be affected by ulcerative colitis. They include arthritis (5-20%), inflammatory spinal arthritis (3-6%), eye complications (4-10%), mouth ulcers (5-10%), fatty liver, cirrhosis of the liver (1-5%), and a deadly liver disease called primary sclerosing cholangitis (1-4%).

The cause of death from ulcerative colitis may either be from a complication of an acute attack, such as rupture of the colon or from colon cancer, years later. Colon cancer becomes an increasing concern as the number of years of disease activity increases. The extent of ulcerative colitis disease is a function of the duration of activity and the extent of bowel that is involved with disease. Either the entire colon is involved, called *pancolitis*, or only part of the bowel, such as *proctitis*. The latter is much less likely to evolve into colo-rectal cancer. Removing the entire colon as part of therapy removes the chances of colon cancer in later years.

Among those with ulcerative colitis, there is a positive family history in 8-11% of these individuals. Ulcerative colitis is more common in Jewish individuals. It occurs equally in males and females and the predominant age of onset is between ages of 15 and 35 years. There is a second and smaller peak in the 7th decade.

Some of the medicines used to treat ulcerative colitis are *Sulfasalazine* (Azulfidine) both for mild flare-ups and for the chronic treatment used to decrease the frequency of relapses, *cortisone enemas* for less extensive disease, and *Prednisone* for more extensive disease. Approximately 10% of patients have chronic disease activity and require continuous low - moderate steroid doses. Some of the newer agents include oral *5-ASA derivatives*; topical use of *sodium cromoglycate*, and *sucralfate* (Carafate) are being studied. Commonly,

surgical removal of the diseased colon is the best option. It takes care of both the symptoms of the disease and the need for colon cancer surveillance with colonoscopies every few years.

Questions:

- What are the names and dosages of the medicines that are taken for ulcerative colitis?
- How old was the applicant when it was diagnosed?
- Has the applicant had any surgery for this condition?
- How many times has the applicant been hospitalized over the past five years for ulcerative colitis?
- How many flare-ups of the disease has the applicant had over the past three years?
- When was the last internal colon examination (colonoscopy)? What did it show?
- Who has the most complete records containing relevant medical information about this disease?

Rating: Ratings are likely for this chronic condition characterized by periods of attacks intermingled with remissions. Ratings depend upon the:

- number of years since the onset of ulcerative colitis;
- frequency of attacks;
- how much of the colon is affected;
- the seriousness of the symptoms, which include lower abdominal pain, diarrhea, weight loss, anemia from blood loss, and fatigue;
- presence of episodes of colon obstruction;
- the extent of any surgery;
- presence of premalignant changes of the colon.

Thus, complications, disability, quality of follow-up, and treatment requirements all play a role in risk assessment.

Mild disease that involves only a small portion of the bowel may be standard. Also, someone who has had his complete large colon surgically removed would be considered standard a year or so later if he is otherwise disease free. Mild to moderate degrees of involvement may call for a low to medium rating. Serious degrees warrant high ratings or declination. An applicant whose onset of disease is within 6-12 months might be postponed.

Underweight

Description: This simply means that one's weight relative to his/her height is less than the average weight for that height in the general population. Its significance lies in whether or not being underweight is a reflection of a serious underlying disease. One's weight relative to his/her usual weight is what is important. Unexplained weight loss may be due to many disease states including cancer, diabetes, depression, any chronic disease and eating disorders.

Questions:

- What is the applicant's current weight?
- What was his/her weight 6 and 12 months ago?
- Is he/she trying to lose or is it coming off on its own?
- Does the applicant have any chronic medical problems that may account for the low weight?
- What medicines (prescribed and over-the-counter) is he/she taking?
- Has he/she sought medical attention for the weight loss? When was his last visit to the doctor? For what reason?

Rating: Generally speaking, underweight by itself does not preclude standard acceptance, unless weight loss is continuing. An eating disorder may need to be ruled out before an underwriting assessment is completed.

Urinary Incontinence

The urinary bladder serves as a reservoir that allows the individual to void voluntarily. If the bladder is unable to hold urine either because of (bladder) muscle weakness, muscle irritability, or the presence of an "incompetent bladder valve", voiding becomes involuntary. The condition is seen in many individuals in their sixties or older. It is also seen in debilitated states. The case is usually standard unless the urinary incontinence results from a neurologic disease or is part of a debilitated state.

Varicose Veins (of legs)

Description: This is a common problem and one that is generally more cosmetic than medical. Veins that are very small (*spider veins*) or very large veins may be involved with this condition.

Questions:

- How is the condition treated? Has he/she had surgery for this condition?
- Has the applicant been hospitalized for this condition?

- Is there a history of thrombophlebitis (blood clot formation in the vein) or pulmonary embolus (blood clot breaking away from the veins and entering the lungs)?
- Are there any ulcerations of the legs or feet? If so, are they infected?

Rating: Unless the varicose veins indicate underlying disease of the major veins and, if there are no complications such as infection, ulceration, or blood clots, the applicant should be standard.

Weight/Build Table

(Male and Female)

The following chart shows the weights that are usually accepted at standard rates. If a person's weight exceeds the weights shown, an extra premium may be applied.

Note there are "product specific" height and weight charts used to determine "Preferred" classifications. Please refer to the specific product Quick Guide for those limits.

HEIGHT	WEIGHT IN POUNDS
4'10"	187
4'11"	191
5'0"	195
5'1"	201
5'2"	205
5'3"	210
5'4"	216
5'5"	222
5'6"	228
5'7"	239
5'8"	240
5'9"	246
5'10"	252
5'11"	258
6'0"	267
6'1"	274
6'2"	281
6'3"	288
6'4"	297
6'5"	304
6'6"	311
6'7"	320

(For weights falling outside these guidelines, contact the underwriter.)