8. Program Options

The medical standards programs of the U.S. DOT modal administrations and foreign countries suggest a number of options that could be incorporated into an FRA medical standards program. This chapter discusses the feasibility of these options. In some cases the appropriate option is clear but in others the choice is not as clear cut and will require input from stakeholders (unions, railroad management, railroad medical specialists) to make a decision.

8.1 Program Components

The overall objective of a medical standards program for railroad workers is to reduce the risk of a serious rail incident precipitated by the medical incapacitation of a railroad worker in a safety-sensitive job. Table 24 summarizes the feasible options for each component of a program with this objective. These options were developed keeping in mind existing laws (e.g., ADA, EEOC guidelines) and the dispute provisions of current labor agreements. Some components have options. In these cases, the options are numbered in the table. In other cases, where there appears to be only one option, the items are bulleted. The following subsections describe the various components and the advantages and disadvantages of each option.

Positions covered – Since the objective of a medical standards program is safety-related, there are two primary ways to identify the positions that are covered by the program. One option is to include those positions that the FRA defines as having safety-sensitive functions in 49 C.F.R. § 209.303. The alternative is to require each railroad to identify the job functions that it determines to be safety-sensitive. This second option, based on the Australian system, puts the responsibility on each railroad, one that would be especially burdensome to short line and regional railroads. If this option were adopted, it may be possible for the smaller railroads to collaborate through the American Short Line and Regional Railroad Association in identifying the positions with safety-sensitive functions. A less burdensome third option is similar to that used in Canada. Under this option the FRA provides a procedure that allows the railroad to justify why a specific function is not safety-sensitive and should not be subject to the medical standards.

Definition of medical criteria – All regulatory medical standards programs are comprised of regulatory language, which sets general criteria (e.g., "has no clinical diagnosis of high blood pressure likely to interfere with the ability to operate a motor vehicle safely"). These criteria are usually supplemented and supported by guidelines, which represent the most current state of medical knowledge on specific conditions.

Unlike regulations, guidelines are not binding. They provide guidance to an examining physician and may provide a carrier some discretion when evaluating whether an employee, performing a function, poses a safety risk. (For example, blood pressure guidelines could set out specific blood pressure readings that should disqualify a locomotive engineer or call for a medical certificate with a shorter duration period subject to reevaluations.)

Generally stated regulations with more specific guidelines permit flexibility in updating guidelines consistent with changes in medical practice. Changing regulations/standards requires going through the rule making process while updating guidelines does not.

Table 24. Options for medical program components

Component	Option(s)
Positions covered	1. All functions defined as safety-sensitive by 49 C.F.R. § 209.303 2. Require each railroad to conduct a risk analysis to identify safety-sensitive functions 3. All functions defined as safety-sensitive by 49 C.F.R. § 209.303 with procedure available for a railroad to justify otherwise
Definition of medical criteria	• Contained in regulations that are supported by guidelines
Development of medical criteria	1. Done by railroad medical specialists 2. Done by independent panel of medical specialists

Timing of examinations	• Post offer
	• Return-to-work following medical leave of absence
	• Fitness to work based on triggering event
	• Change to safety-sensitive or covered position
	• Periodically
	  1. At fixed interval
	  2. Interval based on age

Examiners	1. Any licensed health care professional 2. Physician only
	1. Examiners trained and certified by organization that is approved by the FRA 2. Examiners, with knowledge of railroading, selected by the railroad
Guidance for examiners	• Standards and guidelines available via FRA web site • FRA issues update to railroad medical officers who are responsible for distributing to their examiners • FRA Medical Director/resource person available for health care practitioners with questions
Waivers	1. FRA Medical Officer grants waiver 2. FRA Medical Review Board grants waiver 3. Railroad CMO makes decision in accordance with guidelines
Transferability of medical certification	1. Medical certification for current employer only 2. Medical certification for railroad industry 3. Medical certification for railroad industry but employer may request re-examination
Dispute resolution	• Tripartite medical panel • Arbitration
Transition to new system	• Phase-in period for periodic exams for current employees • All other exams use new standards immediately
Audit of examinations	1. Allow railroad personnel to do quality control on their examiners 2. Third party administrator hired by railroad does quality control
Program oversight	• FRA industrial hygienists check that process is properly implemented (e.g., documentation that timely exams are done and that examiners have knowledge of railroading)
Review of medical standards	• Done by medical specialists on periodic basis
Program evaluation	• Reduction in accidents

Note: Options are numbered for components with multiple options. Where there is only one option, items are bulleted.

Development of medical criteria – Medical specialists are the only people qualified to develop the medical criteria that are contained in *guidelines*. Either a group of railroad medical specialists or an independent panel of medical specialists is suitable for this important task. Canada's medical criteria were developed by a committee convened by the Railway Association of Canada that included railroad medical officers. A panel of independent medical specialists developed the FMCSA guidelines. FRA regulatory specialists must be responsible for drafting the *regulations* but the medical standards should be developed by medical professionals who are familiar with the safety-sensitive functions that the regulations and guidelines cover.

Timing of examinations – Most carriers in the railroad industry already perform medical assessments on four occasions: 1) post-offer, 2) return-to-work following medical leave, 3) fitness-to-work based on a triggering event, and 4) change to a safety-sensitive position. In addition, locomotive engineers have tri-annual vision and hearing screening. The proposed medical standards program adds a periodic medical assessment and standardizes the absence period that necessitates a return-to-work assessment. The frequency of the periodic assessment can either be a set interval for all employees, as is done for motor carrier operators and mariners, or be a function of age, which is the case for all of the other programs reviewed as part of this study. Regardless of whether the interval is fixed or determined by age, there should be a provision allowing the medical examiner to perform more frequent examinations, where necessary, to monitor the progression of a disease or condition. The decision as to the frequency of examination should be made by the medical specialists who develop the medical criteria. Since vision and hearing screening of engineers is currently done every 3 years, complete medical evaluation could also be done at this time.

Examiners – The medical examiner can be either a physician or other licensed health care provider. For example, commercial driver and mariner medical examinations can be performed by any health care professional whose state license permits them to perform independent examinations. This includes physicians (MDs and DOs), advanced practice nurses, physician assistants and in some states chiropractors. To maintain some control over the qualifications of the examiners, the examiner should be selected by the railroad and the railroad should be responsible for ensuring that the examiner understands both the railroad medical standards and the nature of the job that the employee performs. The employee should not be permitted to select the examiner because then there would be no guarantee that the examiner was familiar with the relevant medical standards. A program, such as the FAA's, where the examiners are trained and certified by an organization approved by the FRA would introduce an additional cost to the government which does not appear to be justified. This type of certification system may lead to a limited number of certified examiners who charge a higher examination fee to reflect the time that they invest in maintaining their certification. In addition, this type of system would take longer to implement than one that builds on medical resources that railroads already use.

Guidance for examiners – The FRA Office of Safety should be responsible for maintaining and distributing the standards and guidelines to the railroads' medical officers, or other designated individuals, who in turn will be responsible for ensuring that the medical examiner is updated. The details could be posted on the FRA website but there needs to be a mechanism to notify the railroads that new material is posted. The FRA should maintain a list of individuals at each railroad to whom they send program updates. In addition, the FRA will need either a part-time Medical Officer or other resource person who is available to answer questions from the railroads' health care practitioners.

Waivers- A waiver allows an employee to work when s/he fails some aspect of the medical *regulations* but is judged qualified to continue in his/her position either because s/he has demonstrated through experience or additional medical assessment that the specific demands of his/her job are not jeopardized by his/her condition or, s/he has or can demonstrate that physical adaptations to his/her impaired condition permit him/her to perform the job safely. In the latter instance the waiver might be conditioned on more frequent medical exams or other criteria.

The agency issuing the regulations usually grants a waiver from the regulations. The determination whether or not a waiver will be granted may be made by the FRA, the agency responsible for the regulations, through either an FRA Medical Officer or a FRA Medical Review Board.

The volume of waivers may be related to the degree of specificity of the regulation. More generally stated regulations will result in a need for fewer waivers. If the supporting *guidelines* allow some discretion to the railroad's chief medical officer, then there will be fewer requests for waivers. This discretionary authority would allow exceptions to be made depending upon the employee's safety history and the job that s/he performs. (This is the procedure that is currently used with respect to the FRA vision and hearing regulations. See subsection 2.2.1.) The advantage to allowing the carriers to exercise some discretion in applying the medical guidelines is their superior knowledge of the employee and the job in question. A disadvantage is the lack of national consistency and FRA oversight. By allowing the railroads more discretion, they will bear more liability for the consequences of a variance from the guidelines.

Transferability of medical certification – Medical certification can be for either the entire railroad industry or for only the employee's current employer. Medical certification for U.S. motor carrier operators, airmen and mariners allows the certificate holder to use that certification with any employer, although a new employer may require an examination with an examiner they approve. This type of system requires that the oversight agency handle any requests for a variance from the medical standards. A system where the employee is medically-certified for only his/her current employer allows the employer to develop position specific requirements. For example, a medical standards program where the certificate is employer-specific might allow the railroad's medical officer to certify a controlled diabetic to a position that permits regular hours, breaks and mealtimes.

An employer-based medical standards program is feasible for railroad workers but would not work for pilots, motor carrier operators or mariners. With regard to pilots, the majority of the medical certificates are for private pilots who are not affiliated with an airline or other flight service. Similarly, there are many owner-operator and independent truckers who are not employees of a trucking company, and mariners frequently change employers. In contrast, everyone who operates a locomotive or is involved with train movements works for a railroad. There is no equivalent of the private pilot or independent trucker in the railroad industry.

Dispute Resolution - There are two kinds of situations that will require a dispute resolution process. The first occurs when an employee does not agree with the determination that s/he does not meet the position's medical regulations/guideline(s). Since many labor agreements already provide for a tripartite medical panel, it is the preferable dispute resolution mechanism when this occurs. (A tripartite panel has a neutral doctor, selected by the employee's and employer's doctors. The neutral physician has the final word on the employee's fitness.) The second situation occurs when an employee concedes he does not meet the medical standard but claims

that s/he is entitled to a waiver or more lenient application of the discretionary guidelines because a) his/her body has adapted and compensated for the condition over time and he can and has demonstrated that he poses no unacceptable safety risk or, b) the specific demands of his/her individual assignment do not place him/her in a situation where s/he poses an unacceptable safety risk. In accordance with current labor agreements, an employee protesting his/her disqualification on these grounds would file a grievance and go to arbitration. Both railroad labor and management are familiar with these processes and might oppose a new dispute resolution mechanism. Medical specialists are the individuals who are qualified to resolve medical issues. This must be considered if additional dispute resolution mechanisms are examined.

Transition to new system – Post-offer, return-to-work, fitness-to-work and change of position medical evaluations can begin using the new standards immediately. A phase-in period will be necessary for the periodic exams for current employees and will be based on the frequency set in the regulations. (For example, if medical reviews occur every 3 years, then one third of the employees will be selected for examination in each of the first 3 years after inception of the program.) Since older employees are most at risk, prioritization of employees for medical evaluation could be done by age. A combination of new and old requirements would be confusing for the medical examiners and probably should be avoided for this reason.

A major consideration in planning for transition to a new system of medical review is accommodating current employees who do not meet the new standard. Some employees may be eligible for disability retirement under the Railroad Retirement Board system. These employees may or may not choose this option. For those who choose not to retire or are ineligible, there are three options to consider. They are 1) restricted duty in current craft (e.g., working a daylight yard job rather than a road crew job), 2) alternate placement (e.g., transfer to a clerical job), and 3) variance from the guidelines based on demonstrated job performance but subject to more frequent re-examination than the regulation prescribes. Seniority provisions of Collective Bargaining Agreements limit options for restricted duty or alternate placement. Input from stakeholders is needed before a determination is made as to how to handle the current employee who is medically disqualified.

Audit of examinations – The railroads rather than the FRA should oversee the quality of the examinations. The railroad's medical department can perform this function or can hire a third party administrator to perform this quality control function. Because this is a medical function, it is not suitable for FRA safety inspectors. However, FRA safety inspectors can check to ensure that the railroad has a process in place to assure the quality of its medical examinations.

Program oversight – As part of a routine safety audit, the FRA industrial hygienists working in the field could check that the appropriate processes are in place to administer the medical program in accordance with the regulations and guidelines.

Review of medical standards – To assure that the guidelines reflect current medical standards of practice, a panel of medical specialists, should review the guidelines and update them as necessary. The FRA Medical Program Manager or the FRA Medical Officer can be responsible for assuring that this review is performed.

Program evaluation – Evaluating the success of a medical standards program is difficult. Both Canada and Australia will look at incidence of accidents and injuries where the medical condition of the employee was the cause or a contributing factor. The FRA could do likewise.

The railroads could also look at the rate of absenteeism due to medical conditions and overall expenses for employee health care.

8.2 Candidate Medical Standards

The medical standards of the DOT modal administrations and the foreign railroad organizations have potential application to U.S. railroad positions with safety-sensitive functions. Table 25 summarizes the extent to which each is applicable to selected positions. The similarity of the non-railroad job to a railroad job was the basis for determining applicability. For example, the job of an air traffic control specialist is similar to that of a railroad dispatcher so the FAA ATCS standards should be considered as applicable for only dispatchers. None of the standards listed in Table 25, including those from foreign railroad programs, cover positions similar to railroad signalmen or mechanical department functions. Since both the Canadian and Australian medical standards programs are risk-based, their standards could be applied. The RSSB standards address MOW workers.

Table 25. Applicability of existing medical standards to selected U.S. railroad positions

	Position				
Agency	**Locomotive Engineer**	**Conductor/ Trainman**	**Dispatcher**	**Signalman**	**Other MOW/Mech**
FMCSA	✓				
FAA - Airman	✓				
FAA - ATCS			✓		
USCG - Mariner	✓	✓			
Transport Canada	✓	✓	✓	✓	✓
NTC – Australia	✓	✓	✓	✓	✓
RSSB – U.K.	✓	✓	✓		✓
UIMC	✓	✓	✓		

8.3 Resource Requirements

FRA resource requirements will be a function of the level of control and involvement that the agency has in the overall medical standards program. It is difficult to make a precise resource projection until all of the program decisions, described in 8.1 above, have been made. However, it is possible to estimate the FRA staffing levels for three alternative levels of FRA involvement. Table 26 defines three alternative models of FRA involvement in a medical standards program for railroad workers. All three models assume that 1) there are generally stated regulations with more specific guidelines, 2) the FRA convenes a panel of medical specialists to draft the medical guidelines, and 3) existing dispute resolution mechanisms, specifically the tripartite panel and arbitration, are used. Additional variations on these three models are possible. These models were formulated to illustrate the range of FRA staffing levels that each type of medical standards program would require.

Table 26. Alternative models of FRA involvement in medical standards program

Activity	Model A	Model B	Model C
Certify examiners	✓	Audit process	Audit process
Review results of exams	✓		
Review and permit employees not meeting regulations/ guidelines to work	✓	✓	
Advise on resources examiner should use in making determination	✓	✓	
Convene medical panel to develop initial guidelines and update periodically	✓	✓	✓
Perform process oversight	✓	✓	✓

Model A

This option is similar to the FAA's program. The FRA certifies the examiners, reviews the results of exams and makes decisions in cases where the employee does not meet with regulations/guidelines. Extensive agency resources are required. Employees covered by the Hours of Service Law are a subset of the positions with safety-sensitive functions. Based on the current U.S. railroad labor force, there are approximately 102,000 employees in Hours of Service positions which would require medical review. Assuming each of the 102,000 safety-sensitive employees must be re-examined every 3 years, there would be approximately 33,000 exams per year. If each certified medical examiner handled 100, then there would be a need for 330 FRA-certified railroad medical examiners. The FRA would be responsible for initial certification as well as periodic re-certifications. This model would also require the FRA to have medical staff, either FRA employees or fee-for-service contractors, to review the results of each exam. Clerical staff would be responsible for managing the various files and databases to keep track of examination results. Both medical and legal staff would be involved in review of requests and approval for employees who do not meet the regulations/guidelines to work. Until the regulations and guidelines are written, it is not possible to estimate the number of requests that will occur for these special approvals. Implementing this model would likely take several years once the rulemaking process concluded. Using the ratio of the likely number of required railroad medical examiners relative to the number of AMEs that the FAA has, the FRA resources for this type of program would be the following:

3 form reviewers (non-medical)

10 support staff

1 manager, examiner certification

330 medical examiners

1 part-time physician in each region to review examination results

1 FRA Medical Officer (analogous to Federal Air Surgeon, to oversee program and review requests for employees not meeting regulations/guidelines to work)

The FRA Medical Officer is responsible for convening and participating on a panel of medical experts for initial development of the guidelines as well as for periodic review to update the guidelines.

Model B

Under Model B the railroads have a significant role in the program but the FRA staff members are involved in some medical decisions. The railroads are responsible for selecting and qualifying the medical examiners. The FRA Medical Officer is responsible for reviewing requests and giving approval for employees who do not meet the regulations/guidelines to work. Resource people at the FRA are available to provide guidance on both procedural issues and resources the examiner should use in making the qualification determination. The FRA industrial hygienists, as part of their routine duties, assure that the railroad has procedures in place 1) to select medical examiners with an understanding of the FRA medical standards and 2) to examine safety-sensitive employees at the prescribed interval. This type of program would require the following FRA resources:

1 FRA Medical Program Manager (not an MD)

1 FRA Medical Officer (full-time for 6 months until program is set up, then part-time)

1.5 fulltime equivalent support staff

The FRA Medical Officer is responsible for convening and participating on a panel of medical experts for initial development of the guidelines. S/he is also responsible for periodic review to determine if the guidelines must be updated. The panel members are resources that the FRA Medical Officer uses when specific medical issues require specialist input.

Model C

Model C is similar to Model B except that the FRA is not involved with any medical decision making. The railroads are responsible for selecting and qualifying the medical examiners. The railroad's CMO in conjunction with the employee's management resolves situations where the railroad's medical examiner does not find the employee unconditionally fit for work. Resource people at the FRA are available to provide guidance on procedural issues. Since there is no FRA Medical Officer, staff people provide the guidelines but do not interpret them. The FRA industrial hygienists, as part of their routine duties, assure that the railroad has procedures in place 1) to select medical examiners with an understanding of the FRA medical standards and 2) to examine safety-sensitive employees at the prescribed interval. There is no need for an FRA process to evaluate employees who do not meet the regulations/guidelines because the railroad's CMO has the authority to make these decisions. This type of program would require the following FRA resources:

1 FRA Medical Program Manager (not an MD)

1 support staff

The FRA Program Manager is responsible for convening a panel of medical experts for initial development of the guidelines as well as for periodic review to update the guidelines.