

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

1104 SCOMM 33: WORKERS COMPENSATION, 1979-1982 109

BACKGROUND

The Director of Insurance for Alaska has expressed concern as to the accuracy of Workmen's Compensation rates by classification. This concern is primarily with the rate relativity among classifications within the State of Alaska.

To study this problem, a special subcommittee of the Alaska Classification and Rating Committee was appointed. The subcommittee drew upon both actuarial expertise and Alaska underwriting experience to arrive at their conclusions.

The subcommittee directed its attention to "low credibility" classifications since this is the group where the relativities would be most suspect. The current ratemaking procedure for low credibility classes (known as the National Relativity Program) was examined to determine whether the resulting rates are "not excessive, inadequate or unfairly discriminatory". Alternative methods of ratemaking were also considered.

The analysis of low credibility classes led to an additional review of certain classes whose rates had been questioned by underwriters in earlier studies.

CONCLUSIONS

1. The present system of ratemaking is working correctly to bring about accurate relativities between classes.
 2. Fair and equitable rates are being produced for the low credibility classifications using the National Relativity Program.
- This conclusion is sustained both by consideration of the logic of the Program and by objective tests.

Conclusions (continued)

3. This Program is also proving to be effective in an earlier study in refining the "suspect" classes as designated by underwriters. These "suspect classes" included low credibility classes as well as larger classes.
4. In selected instances, an informed judgmental modification of the rate produced by the standard program is appropriate as it applies to a particular classification. A uniqueness of the Alaska situation or a change in some facet affecting premium development should be given special attention by the Alaska Classification and Rating Committee.
5. This report examines only ratemaking procedures. Consistently accurate application of classifications and the rules of the Manual and Statistical Plan are also important to maintain the integrity of the rating system. As more correct information goes into the ratemaking process and more years of classification relativity are brought into the ratemaking process, the greater will be the accuracy of all rates.

RECOMMENDATIONS

1. Retain the procedures currently being used as the standard ratemaking method.
2. The Classification and Rating Committee should periodically identify those individual classifications, if any, which appear to be out of line. Adjustments then should be made on the basis of informed judgment giving due consideration to:

Recommendations (continued)

- Comparison to other higher credibility Alaska classifications.
- Known changes in exposures or premiums not reflected in the statistical data base.
- Relative differences in exposure between Alaska risks and National risks.

SUMMARY OF REVIEW

1. STATISTICAL TESTS

The Actuary from the National Council on Compensation Insurance, Roy Kallop, gave the Committee an overview of the ratemaking procedure and classification relativity in spreading the premium by classification. He also provided background information relative to the introduction of the National Relativity Program which has been introduced in Alaska as a ratemaking tool.

The Actuary from Industrial Indemnity, Lester Dropkin, presented a study of the 638 classifications in the Compensation Manual as filed with the Alaska Division of Insurance. Following is a table of how the classifications are distributed by degree of credibility:

Category	Description	No. of Classif's.	Ratio to Total	Proportion of Payroll in Category
A	Zero Cred. - No Exposure	300	.47	-
B	Zero Cred. - Some Exposure	65	.10	.002
C	Cred. Less Than 10% in All Parts	151	.24	.055
D	Cred. Less Than 10% in 1 or 2 Parts	29	.05	.045
E	Cred. More Than 10% in All Parts Up to 35% in All Parts	51	.08	.201
F	Cred. More Than 75% in All Parts	6	.01	.106
G	All Other*	36	.05	.592
Total		638	1.00	1.000

Note: "Parts" refers to the Serious, Non-Serious and Medical portions.

*Generally speaking, this category can be viewed as being comprised of classifications having between 35% and 75% in the three parts.

An in-depth study of Category E was made. This Category was chosen as a representative of the low credibility classes but with a significant portion of the total Alaska payroll. The use of national relativity modifies the pure premium in all but one classification, but the average difference is only a plus 2.2%. This indicates that in the aggregate, the National Relativity Program has not caused a serious difference in the amount of premium paid by this group of classifications. In addition, a curve of these variances develops a well-disciplined bell-shaped curve. This demonstrates that the current Program causes no serious aberrations in Manual rates for the Category E classifications and, therefore, by implication the Program is working well with respect to all Alaska classifications. The comparison of current and prior procedures on Category E classifications is shown in the following table:

Ratio	<u>Total PP - Current Procedure</u> <u>Total PP - Prior Procedure</u>	<u>Number of</u> <u>Classifications</u>
	.700 - .749	1
	.750 - .799	1
	.800 - .849	3
	.850 - .899	4
	.900 - .949	3
	.950 - .999	9
	1.000	1
	1.001 - 1.050	9
	1.051 - 1.100	9
	1.101 - 1.150	3
	1.151 - 1.200	4
	1.201 - 1.250	2
	1.251 - 1.300	0
	<u>1.301 - 1.350</u>	<u>2</u>
	Average 1.022	51

A similar review of Category G classifications was made with an average ratio nearing unity at .988 with a well-behaved distribution, as shown on the following table:

Ratio	<u>Total PP - Current Procedure</u> <u>Total P' - Prior Procedure</u>	<u>Number of</u> <u>Classifications</u>
	.800 - .849	2
	.850 - .899	3
	.900 - .949	4
	.950 - .999	8
	1.000	1
	1.001 - 1.050	13
	1.051 - 1.100	2
	1.101 - 1.150	2
	<u>1.151 - 1.200</u>	<u>1</u>
	Average .988	36

Combining E and G considers almost 80% of Alaska payroll with an average ratio of 1.008. It appears the National Relativity Program is working well. It should be kept in mind that total premium is not affected by the distribution among classifications.

II. SPECIAL CLASSIFICATIONS REVIEW

A few years ago, Alaska Pacific Assurance Company and Industrial Indemnity Company identified 45 classifications that appeared "suspect" as to rate: ten being indicated as overrated and 35 under-rated. Four classes, 2702, 2711, 5403 and 6235, are of such high credibility that national relativity has practically no effect.

The same analyses were applied to the remaining 41 classifications that were used on the low credibility classifications. Of the eight remaining "overrated" group, six show a movement to the downward side. Of the 33 "underrated" classes, 27 moved upward. To

restate this, 33 of 41 classes are moving in the direction that underwriting judgment indicated. Five of the variant codes deviate only slightly and current procedures are probably accurate. Code 5606 and two aircraft codes, 7431 and 7422, appear to need administrative consideration.

Code 8831 - Veterinary has specifically been questioned. Low credibility factors, 5%, 12% and 9%, cause the National Relativity Program to have considerable impact. The current ratemaking approach indicates a pure premium of \$4.28; the pure premium under the prior procedure is \$6.98. It is clear the Program is working well to assist the Veterinary class. As a matter of interest, this Class did have losses in the 1973 - 1975 policy years that developed a pure premium for that period of \$5.34.

Attached is a table of the original 45 "suspect" classifications.

III. SUMMARY

From the point of view of both internal logic and objective test, both the Special Committee and the Classification and Rating Committee believe that this study clearly demonstrates that the present methods used to adjust rates on low credibility classifications (and, in fact, on all classifications) are producing fair and equitable rates and are moving rapidly to a more precise distribution of rates.

ALASKA WORKMEN'S COMPENSATION

Overrated	Class	Code	Class %	Formula P.P.		Ratio
				Current	Prior	
	Logging	2702	100, 100, 100	33.37	33.37	1.000
	Canneries	2111	87, 100, 100	7.09	7.14	.993
	Veterinarians	8831	5, 12, 9	4.28	6.98	.613
	Rigging	9530	1, 2, 1	18.03	25.15	.717
	Pile Driving	6003	30, 21, 19	14.28	14.75	.968
	Contractors - Exec.					
	Super.	5606	25, 27, 24	3.29	2.82	1.167
	Sawmills	2710	36, 56, 47	10.35	10.41	.994
	Plumbing	5183	47, 49, 45	3.90	3.87	1.008
	Excavation	6217	66, 54, 48	4.55	4.67	.974
	Clerical	8810	40, 57, 69	.27	.29	.931
Underrated	Carpentry N.O.C.	5403	100, 100, 99	5.11	5.11	1.000
	Oil Well Drilling	6235	100, 99, 87	7.01	7.01	1.000
	Rock Excavation	1605	5, 4, 5	5.35	4.82	1.110
	Welding	3365	16, 26, 26	5.74	4.96	1.157
	Concrete Const. N.O.C.	5213	58, 59, 66	5.23	5.12	1.021
	Roofing	5551	29, 30, 33	11.27	11.14	1.012
	Carpentry - New Res.	5645	28, 47, 39	4.49	4.00	1.123
	Sewer Const.	6306	36, 41, 37	6.04	5.90	1.024
	Contractors Yard.	8227	34, 45, 41	3.13	3.24	.966
	Concrete Bridge Const.	5222	17, 16, 16	6.45	6.16	1.047
	Plastering	5480	4, 7, 5	4.52	4.04	1.119
	Road Const. - Rock	5508	11, 11, 11	4.74	4.78	.992
	Sheet Metal Work	5538	20, 25, 28	3.53	3.05	1.157
	Oil Well - Perf. or					
	Casing	6214	4, 4, 5	4.59	4.81	.954
	Paving	5506	64, 72, 65	5.89	5.79	1.017
	Fence Const.	6400	7, 11, 8	4.35	4.28	1.016
	Non-Sched. Airline	7431	61, 75, 61	11.96	14.79	.809
	Lumber Yards	8232	29, 46, 39	4.04	3.70	1.092
	Aircraft N.O.C.	7422	78, 32, 34	9.85	11.62	.848
	Gasoline Oil Dlrs. -					
	Wholesale	8350	15, 16, 17	3.08	2.35	1.311
	Wholesale Meat or Fish	8021	4, 13, 9	3.94	3.93	1.003
	Bottling N.O.C.	2157	3, 6, 6	3.18	2.90	1.097
	Laundries	2585	5, 9, 8	2.42	2.13	1.136
	Carpentry Shop	2802	7, 14, 10	4.18	3.84	1.089
	Printing	4299	3, 9, 8	1.38	1.19	1.160
	Newspapers	4304	4, 7, 6	1.63	1.21	1.347
	Wholesale Stores	8018	10, 22, 19	2.06	1.67	1.234
	Department Stores	8039	12, 25, 28	.88	.75	1.173
	Nursing Homes	8829	8, 20, 15	2.19	2.12	1.033
	Hospital Professionals	8833	16, 27, 30	.78	.75	1.040
	Hospitals - All Others	9040	10, 20, 21	2.05	1.93	1.062
	Household Appl. Inst.	9519	6, 8, 8	1.98	1.64	1.207
	Buildings N.O.C.	9015	13, 22, 21	2.74	2.46	1.114

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INTRODUCTION

A particular Manual Rate for a given classification is the end result of the manual ratemaking system. The ratemaking system itself may be conveniently viewed as having three principal components or steps:

- (1) The determination of an overall rate level change indicated by aggregate experience.
- (2) The determination of the proportion of the overall rate level change that each classification should bear, i.e., a distribution or allocation of the overall change to individual classifications; and
- (3) The inclusion of a provision for expenses.

While the first and third of the aforementioned steps are, of course, of great importance, a concern has recently been expressed with respect to the second component. More particularly, the question has been raised as to whether or not, or to what degree, current approaches and procedures as applied to a certain segment - often referred to as "low credibility" classifications - are producing rates for these classifications which are fair and equitable.

Accordingly, a Special Committee representing both underwriting and actuarial knowledge and expertise was formed to study, analyze and report on the question of the low-credibility classifications.

Specifically, the Special Committee was charged with:

- (1) Determining whether the present methods used to adjust rates on low credibility classifications are producing fair and equitable rates, and
- (2) Recommending any appropriate changes in methodology or approach which would make rates for low credibility classifications more fair and equitable.

That portion of the manual ratemaking system which has been identified above as the second principal component is often referred to as the "relativity" portion of the rate revision. This is a very revealing term, for it emphasizes the fact that the only purpose of this part of the process is to determine the relationship in which one classification stands to another. Whatever methods or procedures may be used will in no way affect the required aggregate amount determined by the overall rate level calculations. .

In the relativity portion of the rate revision an examination is made of the actual incurred experience of each classification in terms of "pure premium" rates; that is, the loss rate per unit of exposure, the unit of exposure for virtually all classifications being payroll in hundreds of dollars. Because the individual classifications vary considerably with respect to the volume of experience which is developed, consideration must be given to the credibility which attaches to a given volume of experience. ⁽¹⁾ The greater the volume, the greater the credibility. ⁽²⁾

Although an actual rate revision proceeds by considering the Serious, Non-Serious and Medical portions of the experience separately (including the separate assignments of Serious, Non-Serious and Medical credibilities), it is convenient for the purposes of this discussion not to make specific reference to this fact, since the ideas and concepts used are common to all three parts.

If all classifications were sufficiently large, it is clear that the distribution of an overall change to the individual classifications could proceed quite simply by reference to the individual classification's experience pure premiums. ⁽³⁾

(1) "Volume of experience" is measured by the amount of expected losses.

(2) Credibility is assigned as a factor on a scale from 0 to 100 percent; a credibility factor of 100 represents a volume of experience which is fully credible.

(3) There are, of course, a number of actuarial adjustments that must be made to the raw experience as reported under the Statistical Plan. However, these adjustments are outside the present focus of interest and do not affect the concepts under discussion.

The fact that this situation does not exist (in all jurisdictions, as well as in Alaska), i.e., that there is a whole spectrum of credibilities which apply to the various classifications, forces both the ratemaker and the rate regulator to give consideration to additional sources of information.

The mechanism by which the informational content of other sources is brought into the ratemaking process is to compute a formula pure premium which is a credibility weighted average. The classification experience pure premium is weighted by the appropriate classification credibility factor. The complement of the credibility factor (100% minus the class credibility factor) is then available as a weight for the informational content of the other sources. As a formula:

$$\text{Formula Pure Prem.} = Z(\text{Class. Exp. Pure Prem.}) + (1-Z) (\text{Info. in Other Sources})$$

where Z stands for the class credibility factor.

Since the first term on the right is expressed in terms of pure premiums, the information in other sources must also be expressed in terms of pure premiums.

Until recently, a single other source was used to receive the weight of the complement of the class credibility, viz. the present on rate level underlying pure premium. Recognizing, however, that there is an additional source of information that was not being made use of - the relationships among classifications exhibited by the experience in other states - the procedure has been changed to incorporate this additional informational content.

This modification within the relativity portion of the manual ratemaking process, which has been introduced in Alaska (and other states), is referred to as the National Relativity Program. An actuarial description, in the form of a paper appearing in the Proceedings of the Casualty Actuarial Society, is contained in Appendix B. Reviews of the paper, also appearing in the Proceedings of the CAS, are contained in Appendix C.

The essence of the program consists of:

- (1) Determining what may be called "indexed" national pure premiums. These indexed pure premiums preserve the relationships or relativities indicated by experience in states other than Alaska, while expressing them in terms of levels appropriate to Alaska; and
- (2) Splitting the available credibility, i.e., the complement of the class credibility, into two parts. The first part, the credibility which attaches to the classification experience of the other states - and which in its application to a given Alaska classification is never permitted to exceed one-half of the complement of the (Alaska) class credibility - becomes the weight given to the indexed pure premium. The residual credibility, i.e., (100% - Alaska Class Credibility - Indexed Class Credibility), is applied to the present on rate level pure premium.

In brief, the situation is as follows:

	Prior Procedure	Modified Procedure
Formula Pure Premium Equals	$Z \times (\text{Class. Exp. PP})$	$Z \times (\text{Class. Exp. PP})$
		+
		$Z_n \times (\text{Indexed Nat'l. PP})$
	+	+
	$(1-Z) \times (\text{Pres. on Rate Level PP})$	$(1-Z-Z_n) \times (\text{Pres. on Rate Level PP})$

Where Z is the classification credibility and Z_n is the applicable national classification credibility.

Because of the manner in which the program is applied, it is immediately clear that:

- (1) As before, there is no impact on overall rate levels, i.e., the total premium collected will be the same under both procedures. (See Appendices B and C, together with the material contained in Exhibit II of 11/11/77 memo in re: Review of Premium Level and Classification Experience Exhibits.)

- (2) There can only be a small effect on classifications with moderate to high volumes of experience, since the class credibility, Z , is significant and Z_n is at most one-half of $(1-Z)$.
- (3) Potentially, the greatest impact can only be on those classifications with low class credibilities. The actual impact on any given classification depends on the class credibility, the applicable national class credibility and the spread among the class experience pure premiums, the indexed national pure premium and the on-level underlying pure premium.
- (4) A modification in the ratemaking procedure which incorporates information which has not previously been utilized about the relationships among classifications elsewhere represents a desirable modification.

There is, of course, a proviso that accompanies the last statement. It depends upon the acceptance of the general proposition that there exists an inherent relativity of hazard among classifications. In this connection, it is most important to recall that in using the national relativities in Alaska, any differences that may exist between Alaska and any other state with regard to wage levels, benefit levels, the administrative and judicial climate, etc., have been factored out. The only information being used is that having to do with intrinsic relativities.

It is also important to distinguish between a program, as an overall program, consistently and uniformly applied to all classifications, and the results of the application of the program to some relatively few classifications wherein, as with any statistical or actuarial program, it is possible that the results produced may justify an override based on informed actuarial or underwriting judgment.

The discussion to this point has been in more or less broad terms. Reference has been made to the national relativity program in general, to classifications in general, and to credibilities in general. This has been necessary in order to:

- (1) Provide an appropriate referential structure of concepts, and
- (2) Emphasize that the actuarial procedures applicable to the low credibility classifications are continuous with those applicable to classifications with higher credibilities.

Alaska currently has some 638 classifications.⁽⁴⁾ Although any categorization of the classifications by amount of credibility obviously involves some degree of arbitrariness, the Special Committee agreed that the segmentation shown below in Table 1 was reasonable and would provide for a meaningful categorization of the classifications. Table 1 shows the number of classifications in each category, the ratio of this number to the total, and the proportion of payroll represented by the given category.⁽⁵⁾

(4) Excluding the 24 classifications in the 48xx series - the Chemical Plan classes.

(5) The quantitative material in this Report is based on Exhibit II-A (the Pure Premium Exhibits) of the 11/11/77 memorandum in re: Review of Premium Level and Classification Experience Exhibits.

TABLE 1

DISTRIBUTION OF ALASKA CLASSIFICATIONS
BY DEGREE OF CREDIBILITY

Category	Description	No. of Classif's.	Ratio to Total	Proportion of Payroll in Category
A	Zero Cred. - No Exposure	300	.47	-
B	Zero Cred. - Some Exposure	65	.10	.002
C	Cred. Less Than 10% in All Parts	151	.24	.055
D	Cred. Less Than 10% in One or Two Parts	29	.05	.045
E	Cred. Above 10% in All Parts Up to 35% in All Parts	51	.08	.201
F	Cred. More Than 75% in All Parts	6	.01	.106
G	All Other*	36	.05	.592
Total		638	1.00	1.000

Note: "Parts" refers to the Serious, Non-Serious and Medical portions.

*Generally speaking, this category can be viewed as being comprised of classifications having between 35% and 75% in the three parts.

The classifications in categories A and B represent a majority of the classifications by number (57%) but only a miniscule portion of the total Alaska exposure (0.2%). Consequently, these categories are of no concern from the point of view of evaluating the impact of using national relativity experience.

At the other end of the scale, the six classifications in category F, representing 1% of the classifications and 10.6% of the exposure, have high credibilities and - again from the point of view of evaluating the current use of the national program - are also of no concern.

The remaining 42% of the classifications represent the area in which use of the modified approach has the greatest potential impact - and which therefore were subjected to further review and analysis.

Category E, containing 51 classifications with credibilities above 10% in all parts up to 35% in all parts, was selected for further review. This category was chosen for several reasons:

- (1) These classifications epitomize the low credibility classifications.
- (2) They represent a significant portion of the total Alaska exposure - 20.1%.
- (3) Each of the classifications develops a small volume of experience in each of its parts.
- (4) A meaningful comparison can be made of the results which would have been obtained under the prior procedure with that which actually results under the current procedure. This will tell us how the overall relativity under the new procedure compares to that under the old procedure and whether the new procedure develops any serious aberrations.
- (5) If the review and analysis of this category were to demonstrate that the national relativity program was working well, it would indicate no need for concern with respect to the other categories, especially categories C and D.

Accordingly, for each of the 51 classifications comprising Category E, the total pure premium determined using current procedures (i.e., reflecting the incorporation of the national relativities) was compared to the total pure premium determined using prior procedures (i.e., not using the national relativities) by taking the ratio of the first to the second.

It should be noted here that along with the introduction of the national relativity program, two other modifications were made. These were: (1) the

assignment of classification credibilities on the basis of one percentage point increments in lieu of the 10 percentage point increments previously used; (2) using three policy years of experience for the classification experience base in lieu of the two years previously used. These modifications are not major ones. Nevertheless, to the extent that they have substantive impact on the formula pure premiums, they operate in the direction of making them more reflective of actual Alaska experience. Moreover, since both the prior procedure and current procedure total formula pure premiums entering into the test ratio incorporate these two modifications, it insures that the test ratio is measuring only the impact of the national relativity program and nothing else.

Table 2 below sets forth a summary of the results obtained. A list of the classifications in Category E and the comparison of their total pure premiums under the two procedures is contained in Appendix D.

TABLE 2
COMPARISON OF CURRENT AND PRIOR PROCEDURES
CATEGORY E CLASSIFICATIONS

Ratio: $\frac{\text{Total PP - Current Procedure}}{\text{Total PP - Prior Procedure}}$	<u>No. of Classifications</u>
.700 - .749	1
.750 - .799	1
.800 - .849	3
.850 - .899	4
.900 - .949	3
.950 - .999	9
1.000	1
1.001 - 1.050	9
1.051 - 1.100	9
1.101 - 1.150	3
1.151 - 1.200	4
1.201 - 1.250	2
1.251 - 1.300	0
<u>1.301 - 1.350</u>	<u>2</u>
Average 1.022	51

A review of the information contained in Table 2 will reveal two very important facts. The first is that the average ratio is 1.022. In other words, the incorporation of the national relativity experience into the ratemaking process as respects this group of classifications has not affected, on the average, their rate level to any significant degree. In other words, the relative amount of premium paid by these classifications remains approximately the same.

Now, while the very manner by which the national pure premiums are calculated and used as part of the relativity portion of the rate revision insures that their use with respect to the aggregate of all the 638 classifications will be unbiased, the fact that their use with respect to a significant segment is also unbiased is clearly a very material result.

Moreover - the second important fact - the distribution of the ratios "mounds up" about the mid value. It is at least imaginable that there could have been a distribution which had an average close to unity, but in which most of the classifications had ratios which were either very large or very small. The fact that this did not occur, that on the contrary, the distribution is bell-shaped and well-behaved, is clearly, also a very material result. This indicates there are no serious aberrations in relativity as a result of using national relativity.

Taken together, these two facts demonstrate that the current program is working extremely well as respects the Category E classifications, and therefore by implication with respect to all Alaska classifications.

The Special Committee, however, felt that since the 36 classifications comprising Category G did represent 59.2% of the total Alaska exposure, it would be valuable to perform the same analysis for this category. Table 3 sets forth the summary; Appendix E contains the details.

TABLE 3

COMPARISON OF CURRENT AND PRIOR PROCEDURES
CATEGORY G CLASSIFICATIONS

Ratio: <u>Total PP - Current Procedure</u> <u>Total PP - Prior Procedure</u>	<u>No. of Classifications</u>
.800 - .849	2
.850 - .899	3
.900 - .949	4
.950 - .999	8
1.000	1
1.001 - 1.050	13
1.051 - 1.100	2
1.101 - 1.150	2
1.151 - 1.200	1
Average .988	36

A review of Table 3 immediately shows that the average ratio of .988 is again very close to unity, and that, here too, the distribution is bell-shaped. In combination, Categories E and G sweep in just under 80% of the total Alaska exposure; the average ratio is 1.008.

Recently, the current manual rate for the Veterinary classification - Code 8831 has been questioned. This classification has credibility factors of 5% Serious, 12% Non-Serious and 9% Medical thus placing it in a category, Category D, which has not been specifically reviewed. The current ratemaking program indicates a pure premium of \$4.28; the pure premium under the prior procedure is \$6.98. As a result of the application of national relativity, the accuracy of the rate for 8831 has been remarkably improved.

There is another important inference that can be drawn from the demonstration that the current program is working well. For those classifications which today have, either literally or virtually, no exposure, the introduction of the national relativity program means that the ratemaking system is developing rates which will provide a reasonable starting point should exposure subsequently develop.

From the point of view of both internal logic and objective test, both the Special Committee and the C & R believe that there has now been a clear demonstration that the present methods used to adjust rates on low credibility classifications (and indeed on all classifications) are producing fair and equitable rates.

The foregoing conclusion that the present Program, as a program, should continue to be part of the ratemaking process does not, however, eliminate the fact that in its application to some relatively few classifications informed actuarial and underwriting judgment may indicate that the pure premium derived by formula should be modified. Such a circumstance may arise, for example, if the spectrum of employments, operations or businesses within the given classification is radically different in Alaska as compared to the scope of the same classification in other states.

In such instances it was concluded that it would be appropriate if one of the following techniques were utilized:

- (1) Establish the pure premium for the given classification on the basis of a factor relationship to the pure premium developed under the standard program of another classification, or
- (2) Establish the pure premium for the given classification as a weighted average of the pure premiums developed under the standard program of other selected classifications, or
- (3) Combine, for ratemaking purposes, the experience of the given classification with the experience of one or more other selected classifications, and use the resulting pure premium for all the classifications in the combination, or
- (4) Combine experience as in (3), but then distribute the resulting pure premium according to a pre-determined relationship, or

- (5) Modify the pure premium for the given classification on a one-time judgmental basis based on reasonable assessments of relative differences between Alaska and other states in wage levels, operations, exposure and employment conditions.

This list is not necessarily intended to be exhaustive, but rather illustrative of approaches. It should be noted that if the pure premium developed by the standard program for a given classification is adjusted, subsequent rate revisions would automatically be geared to the newly-adjusted starting pure premium rate.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

- (1) Fair and equitable rates are being produced for the low credibility classifications by using present procedures. This conclusion is sustained both by consideration of the inner logic and rationality of the National Relativity Program and by objective tests.
- (2) In selected instances, an informed judgemental modification of the rate produced by the standard program is applied to a particular classification is appropriate.

Recommendations:

- (1) Retain as the standard ratemaking method, the procedures currently being used.
- (2a.) The Classification and Rating Committee should identify those individual classifications, if any, which on the basis of the totality of information available might appear to be out of line, and
- (2b.) As appropriate, adjust these classifications; due consideration being given to the several techniques suggested in this Report.

Appendix A

1978 Alaska Classification and Rating Committee,
National Council on Compensation Insurance

Alaska Pacific Assurance Company
C. L. Anderson, Vice President

Alaska Insurance Company
Jerome Stubb, Secretary

Fireman's Fund
W. M. Ray, Resident Vice President

Industrial Indemnity Company
H. S. Fisher, Resident Vice President

Providence Washington Insurance Company
E. L. Wallace, Jr., Vice President
C. A. Szopa, Casualty Manager

Employers Insurance of Wausau
E. E. Anderson, Regional Vice President

Special Committee on Low Credibility Classifications

Electric Mutual Liability Insurance Co.
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APPENDIX B

USE OF NATIONAL EXPERIENCE INDICATIONS IN WORKERS' COMPENSATION
CLASSIFICATION RATENAKING

by

Frank Harwayne

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USE OF NATIONAL EXPERIENCE INDICATIONS IN
WORKERS' COMPENSATION INSURANCE
CLASSIFICATION RATEMAKING

The use of national experience indications in workers' compensation insurance classification ratemaking is more familiarly known as small credibility ratemaking. It is a response to a current need and one which is closely akin to processes used during the early days of workers' compensation insurance classification ratemaking.

Historically, classification ratemaking depended to a large extent upon national pure premiums¹, that is, pure premiums were derived from observations of the countrywide classification experience. Differences in pure premium from state to state depended upon measured differences in benefit levels provided by workers' compensation law in each state. Subsequently this approximation to costs under individual state laws was abandoned as being too crude.

The general movement of state regulation has been in the direction of recognition of each state's own experience. The rates produced as a result of this movement are valid to the extent that the experience within a state is credible. To the extent that the classification experience is not credible, the post World War II techniques used have been those of changing the rates for the non-credible classifications (that is, the non-reviewed classes) only to the extent of general changes in rate level, industry level or law benefit level. The difficulty with this approach is that the limited experience of the non-reviewed classifications is virtually disregarded as being non-credible. Their rates do not reflect changes in actual costs which take place in non-reviewed classifications. Moreover, this approach tends to produce or perpetuate anomalies with respect to competing manufacturers, processors or distributors who operate in different states within the same industry.

1 See Hobbs, C. W., "The National Council on Compensation Insurance", pp.6,100.

Small credibility ratemaking is a way of continuing to use state experience wherever feasible and to meld the national experience to the extent of its credibility. It is more refined than the prior national pure premium system. This refinement was achieved by adjusting the experience for the differences between state and average national benefit levels. In its initial stages during the late 1950's and early 1960's, the tentative small credibility ratemaking approach established 50 classifications which have a substantial payroll base and which normally exist in most states. The partial (serious, non-serious and medical) claim frequencies and partial claim costs for these 50 classifications on a country-wide basis were ascertained. A system was devised for obtaining the partial claim frequencies and partial claim costs from the national data base exclusive of the state which would be considered for rate revision. Factors to adjust to state conditions were determined for application to the partial claim costs and partial claim frequencies for all classifications. The program also required that these national partial claim cost and partial claim frequency indications be introduced to a limited degree in the following way: what normally had been the complement of credibility was subdivided into the credible part of the countrywide information (but it could never exceed 50% of the usual complement of the credibility factor) and the balance of the 100% weight was assigned to the state underlying average claim cost or claim frequency of the classification.

Although the process of the tentative approach could work, it appeared to have a number of gaps. Only 50 of the 700 odd classifications were included as the basis for establishing credibilities for all classifications and these were not necessarily large volume classifications. The particular

fo. which was mathematically correct appeared to require a more sophisticated knowledge than one might reasonably expect of at least some state regulators; explanations of its derivation and operation could not readily be described to the premium paying public and others who are concerned with workers' compensation insurance costs.

A fresh approach to the problem was undertaken. Instead of the tentative approach of using partial claim frequencies and partial claim costs separately, a partial pure premium was utilized and the 50 classifications were replaced by all classes. The experience of other states was modified to permit its inclusion with the state being revised. Separately, the modified national experience³ serious, non-serious and medical pure premium for each classification was multiplied by the payrolls for that classification code number in the state undergoing revision. The sum of the products for all classifications represents what the dollars of loss would have been if modified national experience was distributed according to the payrolls

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- 2 The procedure relied upon fifty key codes or manual classifications to adjust experience in different states to a common level. Countrywide weights based on expected losses for the key codes were used to determine key code average frequencies F_i , and key code average severities S_i , for each state i . For the state k , for which rates were to be revised, actual A-sheet experience was employed to calculate F_k and S_k ; for the remaining states data base records were utilized. Separate averages were calculated for serious, non-serious, and medical losses. The national serious pure premium for classification j , when revising state k , was to be computed as:

$$\text{serious pure premium} = [S_k \sum_{i/k} (iL_j \cdot S_i)] [F_k \sum_{i/k} (iP_j \cdot F_i)]$$

where:

- S_k = key code average serious severity (cost per case) for state k
- iL_j = serious losses (from data base) for classification j in state i
- S_i = key code average serious severity (cost per case) for state i
- F_k = key code average serious frequency (cases per \$100 payroll) for state k
- iP_j = payroll in hundreds for classification j in state i
- F_i = key code average serious frequency (cases per \$100 payroll) for state i

National non-serious and medical pure premiums were similarly derived. The credibility weights assigned to state, national and underlying pure premiums were identical to those finally adopted and described later in the text.

- 3 The term "modified national experience" used in this paper means the experience of all states except the particular state undergoing a rate revision.

generated in the state being revised. The difference between these aggregate losses and the actual losses in the state being revised was used to generate a factor to adjust each state's partial pure premium so that it would balance to the average partial pure premium in the state undergoing revision.

With the modified national experience on the level of the state's partial pure premium, the credibility weighting process proceeds. As in the earlier tentative program, the state's own experience is afforded credibility in accordance with customary standards except that credibility intervals of .01 are used in lieu of .10 of the older system. The modified national classification experience is afforded credibility based on number of claims, but is subject to a maximum not to exceed one-half of the complement of the state's credibility for the classification⁴. The remainder of 100% is assigned to pure premium underlying the present rate for the classification⁵. The process is performed separately for the serious, non-serious and medical pure premiums.

The Appendix contains technical description, formulae, credibility tables underlying the process described above and an illustrative example.

From an analytical point of view, the new small credibility program looks upon workers' compensation experience at two levels. Primarily, the first level affords recognition to experience within the state to the extent of the classification credibility. Where the state classification partial pure premium experience is not credible, reliance is placed upon the corresponding partial pure premium for the classification outside the state, with the proviso that the underlying partial pure premium must always be afforded at least half of the complement of the state classification's partial pure premium credibility. In this way, the rate for a manufac-

4 For example, fifty non-serious claims indicates a national credibility of .30; however, if the state non-serious credibility were .60, then the national credibility is limited to one-half the complement of .60, i.e. .20 in lieu of .30.

5 Also described as present on rate level pure premiums.

Small Credibility Rating Procedures

The National Council has developed a small credibility rating procedure which is expected to result in refined rating.⁶ The procedure involves the use of a data base consisting of individual classification experience on an individual state basis for three policy years. The experience consists of the following records:

1. payroll
2. number of serious cases
3. amount of serious losses
4. number of non-serious cases
5. amount of non-serious losses
6. amount of medical losses
7. policy periods & law level

Proposed partial pure premiums are the sum of (1) the product of the state indicated partial pure premium and state credibility in 1% intervals, (2) the modified national partial pure premium and national credibility in 1% intervals, and (3) the present rate level partial pure premium and the residual credibility. State credibility is based upon the same 100% standards and the same formula [criterion for credibility value of Z is equal to $Z^2/2 \times$ full credibility standard] as at present except that the formula is evaluated at 1%, in lieu of 10%, intervals. National credibility utilizes the same formula but, for simplicity, is premised on number of cases rather than expected losses and is limited to 50% of the complement of the state credibility. The national serious full credibility standard is 25 serious cases, the national non-serious standard 300 non-serious cases, and the national medical standard 300 non-serious cases, and the national medical standard 300 indemnity (serious and non-serious) cases.⁷

The small credibility procedure is premised upon the principle of uniform relative hazard among states. This principle refers to the hazard for any classification in any state having the same relationship (except for chance variation), after suitable adjustment by indices, to the hazard of any second classification chosen.

6. See Fallon, Roy H., "A Current Look At Workers' Compensation Rating", P.C.A.S., 1:11 (1979)

7. See Table of "Credibility Criteria For National Experience" appended

that no such experience can be relied upon for that industry, reliance is placed upon other states' experience for that manufacturing industry (with appropriate factor adjustments to reflect general state conditions) in combination with the historical record for the class (underlying pure premium) within the state.

This new process is viewed as an improvement in the effort to achieve fair, reasonable, and equitable rates wherein actual experience within and outside the state is expanded substantially.

The formula recognizes uniform relative hazard by means of state-wide average pure premiums derived from actual experience in each state i and the distribution of payroll among classifications in state k , for which rates are to be revised. For any state i , the state average serious pure premium PP_i is computed as:

$$PP_i = \frac{\sum_j ({}_iL_j + {}_iP_j) {}_kP_j}{\sum_j {}_kP_j}$$

Values of ${}_kL_j$ and ${}_kP_j$ are taken from A-sheet data⁸; for the remaining states, values of ${}_iL_j$ and ${}_iP_j$ are from the data base. The modified national serious pure premium for classification j when revising state k is:

$$\text{serious pure premium} = \sum_{i \neq k} \frac{{}_iL_j + {}_iP_j}{{}_iP_j} (PP_i + PP_k) + \sum_{i \neq k} \frac{{}_iP_j}{{}_iP_j} p$$

where ${}_iL_j$ = serious losses (from data base records) for classification j in state i , and

${}_iP_j$ = payroll in hundreds for classification j in state i

Modified national non-serious and medical pure premiums are similarly derived.

[In the case of classifications that would involve division by zero in the formula definitions of modified national pure premiums, modified national pure premiums are defined to be zero and have no credibility.]

The small credibility procedure does not attempt to improve classification rate-making by the introduction of new credibility standards and/or formulas. Rather, it expands the volume of classification experience by recognizing modified national indications. The result is greater equity among classification rates and no change in overall rate level.

⁸ See Kallop, Roy H., "A Current Look At Workers' Compensation Ratemaking" Exhibit II, P.C.A.S., LXII (1975)

Example calculation of the process is shown below. For simplicity, it is assumed that states a, b and k comprise the countrywide data base. Within each state codes 1 and 2 represent all classes. The proposed serious pure premiums for state k follow:

State k
Computation of Proposed Serious Pure Premiums for All
Classes (Code 1 and Code 2)

	<u>State k</u>		<u>State a</u>		<u>State b</u>	
	<u>Code 1</u>	<u>Code 2</u>	<u>Code 1</u>	<u>Code 2</u>	<u>Code 1</u>	<u>Code 2</u>
1. exposure	10,846,000	8,304,000	7,250,000	110,000,000	3,250,000	210,000,000
2. number of serious cases	15	2	10	10	5	20
3. amount of serious losses	305,100	20,760	220,000	110,000	220,000	440,000
4. state k serious cred.	54%	9%	xx	xx	xx	xx
5. state k present on rate level serious pure premium	2.750	.326	xx	xx	xx	xx

$$P_k = 100 [305,100 + 20,760] \div [10,846,000 + 8,304,000] = 1.702$$

$$P_a = 100 [(220,000 + 7,250,000)(10,846,000) + (110,000 + 110,000,000)(8,304,000)] \div [10,846,000 + 8,304,000] = 1.762$$

$$P_b = 100 [(220,000 + 3,250,000)(10,846,000) + (440,000 + 210,000,000)(8,304,000)] \div [10,846,000 + 8,304,000] = 3.925$$

$$H_1 = 100 (1.702) [(220,000 + 1.762) + (220,000 + 3.925)] \div [7,250,000 + 3,250,000] = 2.932$$

$$H_2 = 100 (1.702) [(110,000 + 1.762) + (440,000 + 3.925)] \div [110,000,000 + 210,000,000] = .093$$

$$\begin{aligned} \text{credibility for } H_1 &= \text{minimum } ((1-.54) \div 2; ((2.932 + 25)^{2/3})) \\ &= \text{minimum } (.23; .71) \\ &= .23 \end{aligned}$$

$$\begin{aligned} \text{credibility for } H_2 &= \text{minimum } ((1-.09) \div 2; 1.00) \\ &= \text{minimum } (.45; 1.00) \\ &= .45 \end{aligned}$$

$$\text{state k indicated serious pure premium for code 1} = 100 (305,100 \div 10,846,000) = 2.813$$

$$\text{state k indicated serious pure premium for code 2} = 100 (20,760 \div 8,304,000) = .250$$

$$\begin{aligned} \text{proposed serious pure premium for code 1} &= (2.813)(.54) + (2.932)(.23) \\ &+ (2.750)(1-.54-.23) = 2.826 \end{aligned}$$

$$\begin{aligned} \text{proposed serious pure premium for code 2} &= (.250)(.09) + (.093)(.45) \\ &+ (.326)(1-.09-.45) = .214 \end{aligned}$$

CREDIBILITY CRITERIA FOR NATIONAL EXPERIENCE

THEORETICAL CREDIBILITY	SERIOUS CRITERION (SERIOUS CASES)	NONSERIOUS CRITERION (NONSERIOUS CASES)	MEDICAL CRITERION (SERIOUS & NONSERIOUS CASES)
1.00	25	300	300
0.99	xx	296	296
0.98	xx	292	292
0.97	24	287	287
0.96	xx	283	283
0.95	xx	278	278
0.94	23	274	274
0.93	xx	270	270
0.92	xx	265	265
0.91	22	261	261
0.90	xx	257	257
0.89	21	252	252
0.88	xx	248	248
0.87	xx	244	244
0.86	20	240	240
0.85	xx	236	236
0.84	xx	231	231
0.83	19	227	227
0.82	xx	223	223
0.81	xx	219	219
0.80	18	215	215
0.79	xx	211	211
0.78	xx	207	207
0.77	17	203	203
0.76	xx	199	199
0.75	xx	195	195
0.74	16	191	191
0.73	xx	188	188
0.72	xx	184	184
0.71	15	180	180
0.70	xx	176	176
0.69	xx	172	172
0.68	xx	169	169
0.67	14	165	165
0.66	xx	161	161
0.65	xx	158	158
0.64	13	154	154
0.63	xx	151	151
0.62	xx	147	147
0.61	12	143	143

CREDIBILITY CRITERIA FOR NATIONAL EXPERIENCE

THEORETICAL CREDIBILITY	SERIOUS CRITERION (SERIOUS CASES)	NONSERIOUS CRITERION (NONSERIOUS CASES)	MEDICAL CRITERION (SERIOUS & NONSERIOUS CASES)
0.60	xx	140	140
0.59	xx	136	136
0.58	xx	133	133
0.57	11	130	130
0.56	xx	126	126
0.55	xx	123	123
0.54	10	120	120
0.53	xx	116	116
0.52	xx	113	113
0.51	xx	110	110
0.50	9	107	107
0.49	xx	103	103
0.48	xx	100	100
0.47	xx	97	97
0.46	8	94	94
0.45	xx	91	91
0.44	xx	88	88
0.43	xx	85	85
0.42	7	82	82
0.41	xx	79	79
0.40	xx	76	76
0.39	xx	74	74
0.38	6	71	71
0.37	xx	68	68
0.36	xx	65	65
0.35	xx	63	63
0.34	5	60	60
0.33	xx	57	57
0.32	xx	55	55
0.31	xx	52	52
0.30	xx	50	50
0.29	4	47	47
0.28	xx	45	45
0.27	xx	43	43
0.26	xx	40	40
0.25	xx	38	38
0.24	3	36	36
0.23	xx	34	34
0.22	xx	31	31
0.21	xx	29	29

CREDIBILITY CRITERIA FOR NATIONAL EXPERIENCE

NATIONAL CREDIBILITY	SERIOUS CRITERION (SERIOUS CASES)	NONSERIOUS CRITERION (NONSERIOUS CASES)	MEDICAL CRITERION (SERIOUS & NONSERIOUS CASES)
0.20	xx	27	27
0.19	xx	25	25
0.18	2	23	23
0.17	xx	22	22
0.16	xx	20	20
0.15	xx	18	18
0.14	xx	16	16
0.13	xx	15	15
0.12	xx	13	13
0.11	1	11	11
0.10	xx	10	10
0.09	xx	9	9
0.08	xx	7	7
0.07	xx	6	6
0.06	xx	5	5
0.05	xx	4	4
0.04	xx	3	3
0.03	xx	2	2
0.02	xx	1	1
0.01	xx	xxx	xxx

USE OF NATIONAL EXPERIENCE INDICATIONS IN
WORKERS' COMPENSATION CLASSIFICATION RATEMAKING

Discussion by
Lester B. Dropkin

Frank Harwayne's paper, which describes the methodology adopted by the National Council on Compensation Insurance with respect to the use of national experience indications, quite properly presupposes a fairly close familiarity with the structure of the Workers' Compensation ratemaking process. For those who have such a familiarity - whether by virtue of having carefully read Roy Kallop's recent paper⁽¹⁾, or by service on one or more of the committees of the National Council, or by other means - the present Harwayne paper will fall naturally into place.

A very valuable and necessary insight into the decisions and methods of the Council has been provided, and undoubtedly will continue to be provided, for both the membership of the C.A.S. and that wider public readership of the Proceedings by the series of papers devoted to explaining and recording the ideas and concepts that constitute the standard Workers' Compensation ratemaking procedure.

It is, of course, well known that the Workers' Compensation ratemaking procedure has two quite distinct components. The first, concerned with developing the indicated overall rate level change, is today based on aggregate premium and loss experience, i.e. on financial data. The second, which may be referred to as the relativity portion of the rate revision, is concerned with the equitable and reasonable distribution of the otherwise determined overall rate level change to the individual classifications. While the process proceeds in terms of pure premiums - and thus suggests that we are dealing with absolute levels - in fact the process is one of determining the proper relative level among the classifications.

(1) Kallop, Roy H., "A Current Look at Workers' Compensation Ratemaking," P.C.A.S., 13:11 (1975).

USE OF NATIONAL EXPERIENCE INDICATIONS IN
WORKERS' COMPENSATION CLASSIFICATION RATING

Though an actual rate revision proceeds by considering the Serious, Non-Serious and Medical components separately, Mr. Harwayne has found it convenient, for illustrative purposes to refer to one component only - the Serious, since the concepts and procedures applying to the Serious component apply to the other components also. This review will also utilize the convenience of referring to only the Serious component.

For those classifications with a sufficiently large volume of (Serious) expected losses to receive full (Serious) credibility, the experience or "Indicated" pure premium becomes the formula pure premium in accordance with what is meant by full credibility.

It is with respect to those classifications which do not develop the necessary volume of (Serious) expected losses for full (Serious) credibility that the present procedure, utilizing national relativities, differs from the former procedure.

Previously, for those classifications with such lesser amounts of (Serious) expected losses the formula pure premium was determined as the credibility weighted average of the indicated pure premium and the underlying or "present" or (rate) level pure premium. However, since there were many classifications in many National Council jurisdictions which were developing either zero or very modest credibilities, the application of the procedure meant that a large number of classifications were simply taking the overall rate level change or something very close to it. In looking at the classifications in a given state, the state was being viewed as though no other state existed, with a consequent loss of valuable information.

Introduction of the national relativity procedure means that the informational input of the relationships exhibited by the modified national experience will now be utilized as part of the process that determines proper classification relativities.

USE OF NATIONAL EXPERIENCE INDICATIONS IN
W. COMPENSATION CLASSIFICATION RATEMAKING

Looking back, we can see in the adoption of the present procedure an almost classic example of Hegelian dialectic with its stages of thesis, antithesis and synthesis:

Thesis - Original, historical use of national experience.

Antithesis - Post Public Law 15 use of state experience.

Synthesis - Present, blended use of both state and national experience.

The new procedure posits the existence of an intrinsic, inherent relativity of hazard among classifications - which, of course, means among employments, operations and businesses - that is independent of state boundaries. To what extent are we willing to accept this premise? This reviewer, for one, has had no difficulty, although the question could be answered more readily perhaps, if we did not have the hundreds of classifications that, in fact, we do have in Workers' Compensation.

Incidentally, it would be interesting to know whether, and if so, how, the Council adapts the procedure to the case of state special classifications and classifications whose definitions may vary somewhat from one jurisdiction to another.

I have no doubt that the paper should be, and will be, required reading for anyone with an interest in the Workers' Compensation ratemaking process. While the paper sets forth the formulae in a concise mathematical way, it may be useful to present part of the illustrative example in an alternative format which explicitly sets out the logical steps of the process, since the paper will surely also be read and referred to by persons less mathematically oriented than actuaries.

The basic information available to us is restated in Exhibit 1; the underlying logic of the steps used to determine the National Pure Premiums is given in Exhibit 2.

Since the relationships among the various classifications will be expressed, in part, by means of ratios to statewide, overall, all classifications combined pure premiums the first part of the process adjusts the Total Statewide Pure Premiums

INDEXED NATIONAL EXPERIENCE INDICATIONS IN
WORKING CLASSIFICATION RATEMAKING

of states a and b to reflect the distribution by class of state k. [Exhibit 2, Col. (6)]. The variation of these Total Statewide Pure Premiums from that of state k [Exhibit 2, Col. (7)] provides factors to be applied to the indicated, classification pure premiums of states a and b to produce what may be called Indexed National Pure Premiums. [Exhibit 2 Col (10)]. It is these Indexed National Pure Premiums which may be said to constitute the real heart of the process, in the sense that they have preserved the original relativities indicated by experience in states other than state k, yet have been expressed in terms of levels appropriate to state k. This may be seen from the following table:

	Classif. 1	Classif. 2	Ratio
Indicated Pure Premium - State a	3.034	.100	30.34
Indicated Pure Premium - State b	6.769	.210	32.23
Indexed National P. P. - State a	2.9305	.0966	30.34
Indexed National P. P. - State b	2.9350	.0911	32.23

While the illustrative example of the paper of course includes a comparison of the Formula Pure Premiums developed under the two procedures, again it may be useful to exhibit the results in a way which emphasizes the basic concern of this part of a rate revision, viz. the relativities:

	Classif. 1	Classif. 2	Ratio
P.P. Underlying Pres. Rates - State k	2.750	.326	8.44
Indicated Pure Premium - State k	2.813	.250	11.25
National Pure Premium	2.932	.093	31.53
Formula Pure Premium - Prior Procedure	2.782	.326	8.53
- New Procedure	2.826	.214	13.21

USE OF NATIONAL EXPERIENCE INDICATIONS IN
WORKSHEET COMPARISON CLASSIFICATION RATEMAKING

Thus we see that while the prior procedure would have changed the present relativity but slightly, the new procedure has allowed a much larger shift, in accordance with the very desirable objective of incorporating the greater body of information provided by the classification experience of other states.

JJD:klm
10/10/77

NATIONAL PURE PREMIUM CALCULATION

(1) State	(2) Classif.	(3) Payroll (State k)	(4) Indicated P.P.	(5) Incurred Losses (3) x (4)	(6) Adjusted Tot. SW PP (5) ÷ (3)	(7) Ratio: 1.702 Adj. Tot. SW PP
a	1	\$10,846,000	3.034	\$329,068		
	2	8,304,000	.100	8,304		
	Total SW	19,150,000		337,372	1.762	.9659
b	1	10,846,000	6.769	734,166		
	2	8,304,000	.210	17,438		
	Total SW	\$19,150,000		\$751,604	3.925	.4336

(1) Classif.	(9) State	(10) Indexed Nat'l. PP (4) x (7)	(11) Payroll	(12) Incurred Losses (10) x (11)	(13) National PP (12) ÷ (11)
1	a	2.9305	\$ 7,250,000	\$212,498	
	b	2.9350	3,250,000	95,388	
	Total		10,500,000	307,886	2.932
2	a	.0966	110,000,000	106,700	
	b	.0911	210,000,000	191,100	
	Total		\$320,000,000	\$297,800	.093

APPENDIX D

CLASSIFICATIONS IN CATEGORY E

(Credibility Above 10% in All Parts Up to 35% in All Parts)

Total Pure Prem.				Total Pure Prem.			
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Class	Prior	Curr.		Class	Prior	Curr.	
Code	Proc.	Proc.	(3)÷(2)	Code	Proc.	Proc.	(3)÷(2)
3632	4.48	4.13	.922	1320	4.30	4.23	.984
4034	6.02	6.85	1.138	4000	4.82	5.19	1.077
4207	3.30	3.16	.958	5192	2.84	2.51	.884
3365	4.96	5.74	1.157	7222	7.98	8.65	1.084
5022	6.47	5.88	.909	7360	6.13	5.39	.871
5040	20.51	20.52	1.003	7380	2.36	2.90	1.229
5057	13.21	12.48	.995	7382	3.66	3.64	.995
5059	18.02	17.99	.998	7421	10.24	8.53	.833
5184	6.75	5.43	.804	7502	3.40	2.56	.753
5221	3.68	3.76	1.022	7539	2.18	2.38	1.092
5222	6.16	6.45	1.047	7610	.68	.59	.868
5462	4.97	4.93	.992	7704	2.82	3.06	1.085
5474	4.45	4.64	1.043	8018	1.67	2.06	1.234
5479	4.40	4.54	1.032	8031	5.05	4.29	.850
5508	4.78	4.74	.992	8019	.75	.88	1.173
5538	3.05	3.53	1.157	8252	3.76	3.96	1.053
5551	11.14	11.27	1.012	8350	2.35	3.08	1.311
5606	2.82	3.29	1.167	8607	4.38	3.65	.833
5651	4.87	5.12	1.051	8742	.48	.51	1.063
6003	14.75	14.28	.968	8833	.75	.78	1.040
6204	11.35	10.67	.940	8901	.43	.49	1.140
6206	5.36	5.46	1.019	9014	2.04	2.12	1.039
6233	6.16	6.32	1.026	9015	2.46	2.74	1.114
6319	6.11	6.59	1.079	9040	1.93	2.05	1.062
1005	3.09	4.03	1.304	9403	6.00	5.92	.987
1165	6.98	5.19	.744				
						TOTAL	= 52.133

$$\text{Avg.} = \frac{\text{Total Col. (3)}}{51} = \frac{52.133}{51} = 1.022$$

APPENDIX E

CLASSIFICATIONS IN CATEGORY G

(All Other)

(1) Class Code	Total Pure Prem.		(4) (3) ÷ (2)	(1) Class Code	Total Pure Prem.		(4) (3) ÷ (2)
	(2) Prior Proc.	(3) Curr. Proc.			(2) Prior Proc.	(3) Curr. Proc.	
2710	10.41	10.35	.994	7540	2.37	2.79	1.177
3724	4.22	4.18	.991	7600	1.59	1.45	.912
5183	3.87	3.90	1.008	7720	3.00	3.13	1.043
5190	3.34	3.44	1.030	8017	1.08	1.03	.954
5213	5.12	5.23	1.021	8033	1.24	1.27	1.024
5506	5.79	5.89	1.017	8107	2.72	3.00	1.103
5507	6.20	6.21	1.002	8232	3.70	4.04	1.092
5645	4.00	4.49	1.123	8293	6.42	6.47	1.008
6216	5.84	6.37	1.091	8387	3.18	3.21	1.009
6217	4.68	4.55	.972	8391	2.58	2.58	1.000
6306	5.90	6.04	1.024	8601	1.29	1.20	.930
7538	15.82	15.03	.950	8606	8.63	7.46	.864
8227	3.24	3.13	.966	8810	.29	.27	.931
7403	3.60	3.13	.869	8868	.37	.33	.892
7422	11.62	9.85	.848	9052	1.68	1.71	1.018
7423	3.55	3.38	.952	9078	3.33	3.24	.973
7425	10.77	9.98	.927	9101	2.15	2.17	1.009
7431	14.79	11.96	.809	9410	1.91	1.83	1.022
				TOTAL = 35.555			

$$\text{Avg.} = \frac{\text{Total Col. (3)}}{36} = \frac{35.555}{36} = .988$$

USE OF NATIONAL EXPERIENCE INDICATIONS IN WORKERS'
COMPENSATION CLASSIFICATION RATEMAKING

By Frank Harwayne

Discussion by James F. Golz

Frank Harwayne's paper, "Use of National Experience Indications in Workers' Compensation Classification Ratingmaking," shows the application of some practical actuarial science to the solution of a lingering problem. The problem: because of low credibility, the rates for some classifications in certain states did not seem to be at, or likely to reach, a reasonable level. The solution: adjust experience from other available states to the exposure distribution and average pure premium level of the state in question, and merge it into the classification ratingmaking procedure.

A few comments on terminology may be in order. Although the procedure is referred to as "national," it might more properly be termed "multi-state" since the data base currently encompasses only those jurisdictions for which the National Council on Compensation Insurance makes rates. Thus, data from about a dozen states (independent bureaus and exclusive funds) is not available. Likewise, although the method is often called a "small credibility" procedure, its use may have some effect on the rate for any classification which does not possess full credibility for all of its partial pure premiums. Indeed, since three years of classification experience are used (as compared to two under the old procedure in most cases) even fully credible classes can end up with a different pure premium from what formerly would have been calculated.

Another item of interest is the subtle change adopted in the calculation of credibility. Credibilities for state experience have been and continue to be based on expected loss dollars. However, credibilities for the national experience are derived from actual claim counts. This slight change signifies, one presumes, no shift in the philosophy underlying credibility, but is merely an adaptation to the data available.

In order to avoid misinterpretations, the National Council has frequently warned against comparing unadjusted classification rates among states. A staff write-up notes that among the factors which cause rates to vary between states are differences in the industries in the state, the definition of exposure (payroll limitation), the benefit level, the administration of the law, the wage levels, the medical facilities, the quality of the labor force, the safety programs in effect, and the degree of attorney involvement. Since the new procedure affects rates by weighting pure premiums (of which rates are a function) between states, it is instructive to observe how these problems are avoided. Any differences in industries are formally adjusted for when the national pure premiums are computed using the exposure distribution in the state under revision. The other factors are not handled individually. Rather, since they all affect costs, they are reflected in the adjustment of each outside state's experience to the subject state's average pure premium level.

One might argue that the benefit level differences could be separately computed by state and the remaining factors then adjusted for in bulk. The technique adopted not only saves this work, but is consistent with a similar treatment employed in the National Council loss ratio trending technique.

There, the trending of on-level loss ratios automatically includes all factors which affect costs and avoids the problem of separate identification and measurement of adjustments for items such as wage level changes, medical cost changes, and the host of other items which could be involved.

The procedure described by Mr. Harwayne seems to be based on reasonable actuarial judgment. Although the algebra may momentarily appear complex, the technique is conceptually straightforward. One potential area of concern remains the vast volume of data involved. The October, 1977, Scientific American contains an article on the solution of the classic four color problem of mathematics, this solution was accomplished by a computer exhaustion of enumerated possible five-color maps. The authors note the reluctance of some to accept their computer proof since it differs so radically from traditional mathematical terseness and verifiability. Similarly here, success in implementing the new technique may depend as much on the ability to demonstrate that accurate data is available and properly adjusted as on any actuarial theory involved.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF EDUCATION

DIVISION OF VOCATIONAL REHABILITATION

Michael C. Morgan, Director

October 6, 1980

Honorable Terry Stimson
Alaska State Legislature
1024 West 6th Avenue
Anchorage, Alaska 99501

Dear Senator Stimson:

Please find enclosed information that you requested from the Division of Vocational Rehabilitation pertaining to Workman's Compensation Rehabilitation. We have compiled statistics which you requested at the hearing in Fairbanks held September 19th and 20th.

The figures include rehabilitations of the last three years and the current listings of where clients are in respective statuses. To better understand those statuses, I have attached what we call a vocational rehabilitation overview that shows the statuses from 00 through 32, and an explanation of those statuses from our statistical reporting system taken from the Rehabilitation Services Manual. Additionally, I've taken the liberty to enclose (for your information) the history of the rehabilitation program and the rehabilitation process. Also included is the Social Security Disability VR program information regarding trial work period and also the special selection criteria established by the Social Security Administration to those individuals that are applying for social security disability and also for vocational rehabilitation services.

If you have any questions and/or concerns regarding this material, please do not hesitate to contact me.

Sincerely,



F. Pat Young, Deputy Director

Enclosures

WORKERS COMPENSATION

FISCAL YEAR '79

- 19 Second Injury Fund clients rehabilitated at an average cost of \$2,499.
- 44 Second Injury Fund clients were closed prior to the planning process or were not successfully rehabilitated. The average expenditure for these clients was \$509.

FISCAL YEAR '78

- 24 Second Injury Fund clients rehabilitated at an average cost of \$2,941.
- 38 Second Injury Fund clients were closed prior to the planning process or were not successfully rehabilitated. The average expenditure for these clients was \$394.

FISCAL YEAR '77

- 26 Second Injury Fund clients rehabilitated at an average cost of \$2,143.
- 46 Second Injury Fund clients were closed prior to the planning process or were not successfully rehabilitated. The average expenditure for these clients was \$391.

* Case expenditure averages represent total case expenditures including general funds as well as 2nd Injury monies.

** Client totals for each fiscal year represent only those cases that completed the rehabilitation process during that particular year.

2

History of the rehabilitation program

OVERVIEW AND OBJECTIVES

This chapter offers the reader a general overview of the history and development of the rehabilitation program in the United States. It is divided into three major sections: (1) significant legislation since 1916, (2) development of the public program in the United States, and (3) development of significant private rehabilitation resources, including national rehabilitation programs, rehabilitation centers, and professional organizations with rehabilitation objectives.

Objectives of this chapter are to familiarize the reader with the major components of significant rehabilitation-related legislation in the United States between 1916 and 1978, to furnish an overview of public federal and state rehabilitation-related program developments beginning with Worker's Compensation provisions in 1908 through the establishment of a separate federal rehabilitation agency by Congress in 1975, and to describe some private rehabilitation resources with a history in the rehabilitation movement.

REHABILITATION LEGISLATION

National Defense Act, 1916

The National Defense Act of 1916 placed importance on the provision of vocational training for soldiers while in active military service. The Act provided an opportunity for soldiers to receive instruction and study to increase their military efficiency and enable them to return to civilian life better equipped for competitive occupations. In many ways this Act was the beginning of a congressional attitude toward rehabilitation which would result in the large national program of today.

Smith-Hughes Act, 1917

The 64th Congress passed Public Law 347 on February 23, 1917. Known as the Smith-Hughes Act, it established a federal-state program in vocational education. It also created a Federal Board for Vocational Education which had the authority and responsibility for the vocational rehabilitation of veterans. In addition, it provided federal assistance grants in support of vocational education to the states on a matching basis.

Background

The Smith-Hughes legislation and the Federal Board of Vocational Education provided a basis for a system of vocational rehabilitation. Funds were provided for vocational education services to the states which met certain requirements. To receive these funds, each state had to pass "enabling" legislation and was required to establish a state board. Money was then provided to the states according to a federal plan (Obermann, 1965; McGowan & Porter, 1967; Dean, 1972; Lassiter, 1972).

Soldier Rehabilitation Act, 1918

Public Law 178, the Soldier Rehabilitation Act, was passed on June 27, 1918, by the 65th Congress. Under this act the role of the Federal Board for Vocational Education was expanded to include authorization to provide programs of vocational rehabilitation for disabled veterans. To be eligible, the disabled veteran had to be unable to engage successfully in a gainful occupation. The legislation became known as the Smith-Sears Veterans Rehabilitation Act and, later, was to provide a basis for the vocational rehabilitation of civilians (Obermann, 1965; Lassiter, 1972).

Vocational Rehabilitation Act, 1920

June 2, 1920, was to mark the beginning of the public rehabilitation program in the United States. On this date the Smith-Fess Act was passed to become Public Law 236 of the 66th Congress.

The Smith-Fess Act not only established the federal-state program in rehabilitation but also provided for an equal expenditure of funds by state and federal governments. It required (1) development of a state plan to be submitted and approved by the federal agency, (2) an annual report to the Federal Board for Vocational Education, (3) establishment of the state program under the state's Vocational Education Board, and (4) prohibition of fund expenditures for buildings or equipment (Lassiter, 1972).

The Vocational Rehabilitation Act of 1920, as interpreted by the Federal Board of Vocational Education, provided funds only for vocational guidance, training, occupational adjustment, prostheses, and placement services. Rehabilitation services were to be for the physically disabled and were to be vocational in nature. They could not include physical restoration or socially oriented rehabilitation (Obermann, 1965). The new Act did not specify a minimum age, but the Federal Board considered the minimum age of legal employability within the state to be the service eligibility policy. Homemaking was considered to be a legitimate occupation.

Within 18 months of the passage of the 1920 Vocational Rehabilitation Act, 34 states passed enabling legislation to organize a program of services that could accept the federal funds available to them on a 50-50 matching basis (Lassiter, 1972).

A 1921 bulletin issued by the Federal Board for Vocational Education identi-

fied specific case procedures and techniques to be used by rehabilitation agents (counselors) in managing the rehabilitation service process. A determination of client eligibility had to be made by the agent in terms of the applicant's age, physical disability, and feasibility for rehabilitation success. A job objective was then identified based on an intensive study of the case. After study a tentative rehabilitation plan had to be formulated in accordance with the client's job objective. Follow-up by the rehabilitation agent was to be provided during training and after job placement until the disabled person was producing at his maximum efficiency (Lassiter, 1972). The Federal Board for Vocational Education emphasized that its role was only in promoting vocational rehabilitation of persons. It clearly stated that the primary responsibility for vocational rehabilitation programming was with the state (Obermann, 1965).

The new rehabilitation program encountered a fiscal crisis in 1924. The 1920 Act was due to expire in June. Unfortunately Congress adjourned without providing appropriations for the program. An appeal by the Federal Board for Vocational Education to President Coolidge, however, resulted in permission to spend the administrative funds necessary to maintain the federal program under a deficit arrangement. This funding was only for federal administration and did not include funding grants to states. Nevertheless, all but one of the 39 states cooperating in the federal-state rehabilitation program at the time were able to keep their activities going by utilizing their own resources. Congress then gave authority to continue the program for an additional six years, to 1930. The necessary appropriations were to follow.

In 1930 the Vocational Rehabilitation Act was again renewed for an additional three years. By this time 44 states were participating in the federal-state program, and in 1932 a further extension of four years was granted to the program by Congress.

Social Security Act, 1935

Prior to 1935 the rehabilitation program was the result of a series of short-term congressional extensions. The Social Security Act of 1935 was the first permanent base for the federal vocational rehabilitation program. It provided for continuous authorization, increased grants, and increased support for the federal administration. It also allowed partial reimbursement by the federal government to the states for assistance given to the needy blind. Thus the vocational rehabilitation program was both continued and strengthened by the 1935 Social Security Act.

Randolph-Sheppard Act, 1936

The Randolph-Sheppard Act of 1936 authorized states to license qualified blind persons to operate vending stands in federal buildings. It also set a precedent for many states to make similar arrangements in state-owned buildings with assistance and supervision from a public agency.

Vocational Rehabilitation Act Amendments, 1943

These Amendments, enacted on June 6, 1943, as Public Law 113, 78th Congress, made changes in the federal-state program of rehabilitation. For example:

1. Vocational rehabilitation was defined to include any services necessary for a disabled person to become employed (Obermann, 1965). This meant that physical restoration services were to be made available to the disabled. The range of available rehabilitation services included corrective surgery, therapeutic treatment, hospitalization, transportation, occupational licenses, occupational tools and equipment, maintenance during training, placement in employment, prosthesis training, medical examinations, and guidance.

2. Vocational rehabilitation was extended for the first time to the mentally handicapped and the mentally ill.

3. Federal administration of grants was transferred from the Commissioner of Education to the Federal Security Administrator, who established an Office of Vocational Rehabilitation on September 8, 1943.

4. Each state was required to submit a state plan for vocational rehabilitation to be approved by the Federal Security Administrator. States were also required to designate the State Board of Vocational Education as the sole agency for the administration of the state rehabilitation plan. An exception was programs for the blind, which could continue under their own administration and still be eligible for federal rehabilitation funds. Thus separate state agencies for the blind were included in the federal-state program.

5. State agency administration, guidance, and placement costs (including staff salaries) would be paid by the federal government. In addition, the 1943 Amendments provided authorization for the federal agency to pay the entire expense of rehabilitating disabled veterans and half the expense for other disabled persons. The federal government also paid the entire cost of administering state programs. Previously program costs were shared equally between the states and the federal government.

Thus the Vocational Rehabilitation Act Amendments of 1943 broadened the program's financial provisions, offered a comprehensive definition for vocational rehabilitation, expanded service provisions to include physical restoration, required state plans for approval by the federal agency, expanded service provision to include the mentally handicapped and mentally ill, and fostered separate agencies for general rehabilitation and rehabilitation of the blind to be monitored by one federal agency (Kratz, 1960; Obermann, 1965; Dean, 1972; Lassiter, 1972).

Vocational Rehabilitation Act Amendments, 1954

Public Law 565 of the 83rd Congress, signed by President Eisenhower on August 3, 1954, was a milestone in the development of the rehabilitation program. It reshaped the role of the federal government in the rehabilitation program

and established the basis for a working relationship between public and private rehabilitation organizations.

The 1954 Amendments provided more funds and additional program options for state agencies. They established a federally funded research program and provided training for staff of both public and private programs. They also authorized grants to expand or improve facilities (Dean, 1972). Significant features of the 1954 Amendments were as follows:

1. A new and variable funding formula meant that the most any state would be required to contribute to public program financing was 40% of the total spent in the general rehabilitation program. The federal share varied from state to state, with greater financial support going to states with large populations and small per capita income.

2. For the first time state agencies were permitted to use funds to expand or remodel buildings to make the buildings suitable for rehabilitation of the disabled (Lassiter, 1972).

3. Special grants were authorized to permit states to develop new aspects of their program or extend services to needy disability groups or geographic areas (McGowan & Porter, 1967).

4. Research and demonstration project grants were authorized to support studies for improving rehabilitation services and demonstrations of new knowledge application. Though the required matching funds of grantees was determined on an individual project basis, congressional appropriations limited the federal share to no more than two thirds of project costs (Obermann, 1965).

5. Training for physicians, nurses, rehabilitation counselors, physical therapists, occupational therapists, social workers, psychologists, and other specialists was authorized to meet the needs of a rapidly expanding rehabilitation program. Grants were given to colleges and universities to develop or expand curricula and to provide financial assistance and incentives in the form of traineeships to graduate students. The Act also provided authority for short-term training grants for seminars and workshops, for in-service training programs in state vocational rehabilitation agencies, and for rehabilitation research fellowships to individuals (Obermann, 1965; McGowan & Porter, 1967; Lassiter, 1972).

Vocational Rehabilitation Act Amendments, 1965

Public Law 333 of the 89th Congress provided for increased federal spending. The Vocational Rehabilitation Act Amendments of 1965 enlarged the federal cost share of rehabilitation to 75%. It provided innovative project grant monies to states for the development of new methods of providing services and for serving the severely disabled. Federal funds were authorized to cover 90% of the project cost in three-year projects and 75% of the cost for the remaining two years in five-year grants (McGowan & Porter, 1967). A program of construction assistance was also authorized for building rehabilitation centers and workshops, expanding

Background

present ones, and helping with the initial staffing costs of new or expanded centers and workshops (Dean, 1972).

The 1965 Amendments created a broader base of services to handicapped persons, including persons with socially handicapping conditions. Economic need was eliminated as a requisite for rehabilitation service. The states were permitted, however, to use an economic need test for services other than diagnostic related services, counseling, and placement.

The 1965 Amendments also allowed extended client evaluation to determine whether there was reasonable expectation that rehabilitation services would help the handicapped person to become employable. This extended evaluation feature permitted services to be provided up to a maximum of 6 months, and 18 months for the severely disabled, in determining employability. The Amendments also authorized special grants for statewide planning of vocational rehabilitation. The purpose of these special grants was to develop a comprehensive vocational rehabilitation plan and program within each state to make services available to all eligible handicapped persons by July 1, 1975 (Lamborn, 1970).

Besides enabling expansion of rehabilitation facilities, the 1965 Amendments created a National Policy and Performance Council to guide the HEW Secretary in the development of policies for improving and expanding rehabilitation facilities. A National Commission on Architectural Barriers was also authorized for the development of proposals for making buildings accessible to the handicapped.

Educational benefits were extended to a maximum of four years under the legislation, as opposed to two years provided under previous law for professional training in the field of vocational rehabilitation. A national data system was established, and intramural research within the vocational rehabilitation agency authorized (Obermann, 1965; McGowan & Porter, 1967; Dean, 1972).

The Vocational Rehabilitation Act was again amended in 1967 to separately provide (1) rehabilitation services for migratory workers, (2) elimination of state residency requirements for serving the disabled in need of rehabilitation services, and (3) construction and operation of a National Center for Deaf-Blind Youths and Adults (Dean, 1972).

Vocational Rehabilitation Act Amendments, 1968

The Amendments to the Vocational Rehabilitation Act of 1968 included (1) a change in the federal-state matching ratio for appropriations from 75-25 to 80-20, (2) approval to expend funds for new construction of rehabilitation facilities, (3) approval to provide follow-up services for maintaining an individual in employment and to provide services for family members of handicapped individuals, (4) permission to amend state plans so one state agency could share funding and administration responsibility with another in carrying out a joint project, and (5) authorization to provide vocational evaluation and work adjustment services

to disadvantaged persons by reason of age, educational attainment, or ethnic or other factors (Lassiter, 1972).

Rehabilitation Act, 1973

Public Law 112 of the 93rd Congress was signed by President Nixon on September 26, 1973. This Act replaced the Vocational Rehabilitation Act as amended in 1968 but did retain the major provisions of the 1968 Amendments. There were, however, some important changes.

1. The Act established, by statute, the Rehabilitation Services Administration.
2. The Act emphasized priority service for persons with the most severe handicaps and mandated state agencies to establish an order of selection that would place the most severely handicapped person first for service as part of the state plan.
3. States were required by the Act to conduct continuing statewide studies relative to the needs of handicapped persons and how these needs might be effectively met. The intent of this requirement was to explore the expansion of services for the most severely handicapped. In addition, states were required to conduct periodic reviews of persons in sheltered workshops to determine their suitability for employment or employment-related training.
4. Under the 1973 legislation every client accepted for services had to be provided an Individualized Written Rehabilitation Program (IWRP). It also required joint counselor-client consultation and development of the IWRP and outlined the program in terms of a vocational goal, intermediate objectives, identification of anticipated dates of initiation and completion of services, and evaluation procedures and schedules. It further indicated that the opportunity for the client to achieve a vocational goal must remain available to the client at least until such time as the counselor could, beyond a reasonable doubt, support a change in the goal.
5. The 1973 Rehabilitation Act also required that several special studies be conducted to (a) determine methods of providing comprehensive services to persons for whom a vocational goal might not be feasible and to determine how services could help these individuals live more independently, (b) identify the role of the sheltered workshop in the rehabilitation process and explore the wage payment structure in sheltered workshops, and (c) determine how the basic state grant allocation formula could be improved.

In addition, the 1973 Act provided several other changes from earlier Acts (LaVor & Duncan, 1974):

- A new federal mortgage insurance program to assist in the construction of rehabilitation facilities
- An Architectural and Transportation Barriers Compliance Board to enforce federal statutory requirements concerning access to public buildings and transportation for the handicapped

Background

The requirement that state rehabilitation agencies would have to seek funds from other existing federal assistance programs before using rehabilitation funds for higher education case service

An annual report on the national program to be submitted to the President and Congress
A clearing house to be established for information concerning programs for handicapped individuals

A federal interagency committee to facilitate employment and advancement of the handicapped in federal government jobs

Prohibition against discrimination solely by reason of a handicap in any program receiving federal financial assistance

Client assistance demonstration projects to inform clients of available benefits under the Act

As indicated in the Preface to this text, there is a trend toward a greater emphasis on independent living services for the disabled. The term "vocational rehabilitation" is gradually being replaced by "rehabilitation" in legislation, in agency names, and in the literature. Some of this change began with the reorganization of the Department of Health, Education, and Welfare in 1967 which created the Social and Rehabilitation Service. However, most of this change in emphasis started with the Rehabilitation Act of 1973—when considerable discussion occurred in Congress regarding the provision of comprehensive services to individuals for whom a vocational goal might not be feasible.

Rehabilitation Act Amendments, 1974

Public Law 516 of the 93rd Congress amended the Rehabilitation Act of 1973 by (1) extending the authorization of appropriations for one year, to June 30, 1976, (2) transferring the Rehabilitation Services Administration to the HEW Secretary (from the Social and Rehabilitation Service) and requiring that the RSA Commissioner be appointed by the President with the consent of the Senate, (3) strengthening the programs for the blind authorized by the Randolph-Sheppard Act of 1936, and (4) providing for a White House Conference on Handicapped Individuals within two years to develop recommendations for solutions to problems facing handicapped persons.

The Rehabilitation Act of 1973 was again extended in 1975 from June 30, 1976, to September 30, 1978.

Rehabilitation Act Amendments, 1978

The Rehabilitation Act of 1973 was again amended on November 6, 1978 (Public Law 602, 95th Congress). Major features are (1) authorization of an annual increase in appropriations for the basic state grant program based on increases in the cost of living, (2) an increase in the minimum state allotment of funds to \$3 million, (3) authorization of a comprehensive program of independent living services for severely handicapped persons, (4) authorization of community service employment programs for handicapped individuals, (5) authorization of a National Institute of Handicapped Research, and (6) a change in the definition

for developmental disabilities from a categorical one to a functional one for any disability occurring before age 22. These Amendments are also referred to as "the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978."

3

Rehabilitation process

OVERVIEW AND OBJECTIVES

This chapter provides the reader with an overview of the rehabilitation process that is utilized in the implementation of the public-private rehabilitation program in the United States. It is divided into two major sections (1) the sequence of rehabilitation services and (2) rehabilitation client programming.

Objectives of this chapter are to acquaint the reader with the public program status codes used to identify client progress through the rehabilitation process, to describe the services utilized during the rehabilitation process and the bases for client selection and program priorities, outcome, and service goals, and to detail the Individualized Written Rehabilitation Program for clients.

SEQUENCE OF REHABILITATION SERVICES

As indicated in Chapter 1, the rehabilitation process is a goal-oriented individualized sequence of services designed to assist handicapped persons in achieving vocational adjustment. The delivery of services is based on the development of a rehabilitation program, or plan, for the individual client. This program is the culmination of preliminary and thorough diagnostic studies.

A strength of the rehabilitation program in the United States is that it is goal oriented. Successful delivery of rehabilitation services will enable the disabled person to engage in employment or other gainful activity.

Status codes

To facilitate the implementation of the public program, the rehabilitation process is categorized in terms of status codes. These codes are intended to reflect the service delivery status and progress of clients through the rehabilitation process. There are sixteen two-digit and even-numbered status codes which range from 00 to 32. There is no status 04. Prior to the Rehabilitation Act of 1973, status 04 reflected a 6-month extended evaluation of applicant rehabilitation potential for those with disabilities which were not severe. However, all applicants may now receive up to 18 months of extended evaluation (status 06) for determination of service eligibility. Status codes can be divided into four major types—including

referral processing (statuses 00 to 08), preservice (statuses 10 to 12), in-service (statuses 14 to 24; 32), and closure of active cases (statuses 26 to 30).

A flow diagram of the rehabilitation process as represented by the status codes is presented in Fig. 3-1.

Status 00 represents *referral* to the rehabilitation program. The referral may be from another agency or individual or a self-referral to the state rehabilitation agency. Whether by personal contact, telephone, or letter, the referral information should include: name and address of the disabled individual, the nature of the disability, age and sex of the individual, the date of referral, and the source of referral.

Status 02 represents *application* for rehabilitation services. This application can be made on an agency form or merely be a letter signed by the individual. While the individual is in this status, information is acquired by the rehabilitation counselor to make a determination of eligibility or ineligibility for rehabilitation services. The rehabilitation counselor may decide to provide an extended evaluation period to make such a determination (status 06).

Status 06 represents an *extended evaluation period*. In the event the rehabilitation counselor is unable to determine whether a client will vocationally benefit if provided rehabilitation services, he may authorize an extended period, not to exceed 18 months, in which to evaluate the person's rehabilitation potential and to determine eligibility or ineligibility for services.

Status 08 is an *ineligible closure* status for all persons processed through referral application and/or extended evaluation and not accepted into the active caseload for rehabilitation services.

Status 10 designates a person as eligible for rehabilitation services and permits *Individualized Written Rehabilitation Program development*. At this point the client becomes an active case. During this stage of the rehabilitation process, the counselor utilizes information from the thorough diagnostic study and, with the client's involvement, prepares an Individualized Written Rehabilitation Program of rehabilitation services for the client.

Status 12 is an administrative code representing *completion of the written program* of service for the client. The client remains in this status until the necessary arrangements are made with service delivery agencies for implementing the Individualized Written Rehabilitation Program.

Status 14 is intended as an in-service classification for cases which require *counseling and guidance only*, and possibly placement services, for preparing the client for employment. It should be noted, however, that counseling and guidance occur throughout the rehabilitation process and support other services. If other services are unnecessary for achieving the rehabilitation objectives and goal, status 14 is an appropriate categorization.

Status 16 represents *physical and mental restoration* services, including medical, surgical, psychiatric or therapeutic treatment, and/or the fitting of a prosthetic appliance.

Status 18 represents *training*. This status may be used to reflect almost any sort of learning situation, including school training, on-the-job training, tutoring, and training by correspondence. Many times physical or mental restoration services are also needed. In such cases the client is generally identified with the status which will represent the longest period of time.

Status 20, like status 12, is an administrative code indicating that the individual

is ready for employment. The client has completed the preparation stages for employment and is either ready to accept a job or has been placed and has not yet begun employment.

Status 22 signifies that the client is in employment. Federal legislation requires that the client remain in this status a minimum of 60 days before being closed as successfully rehabilitated (status 26).

Status 24 is also an administrative classification which indicates service interruption in the rehabilitation process (statuses 14 to 22). The client remains in this status until he returns to one of the in-service statuses or his case is closed.

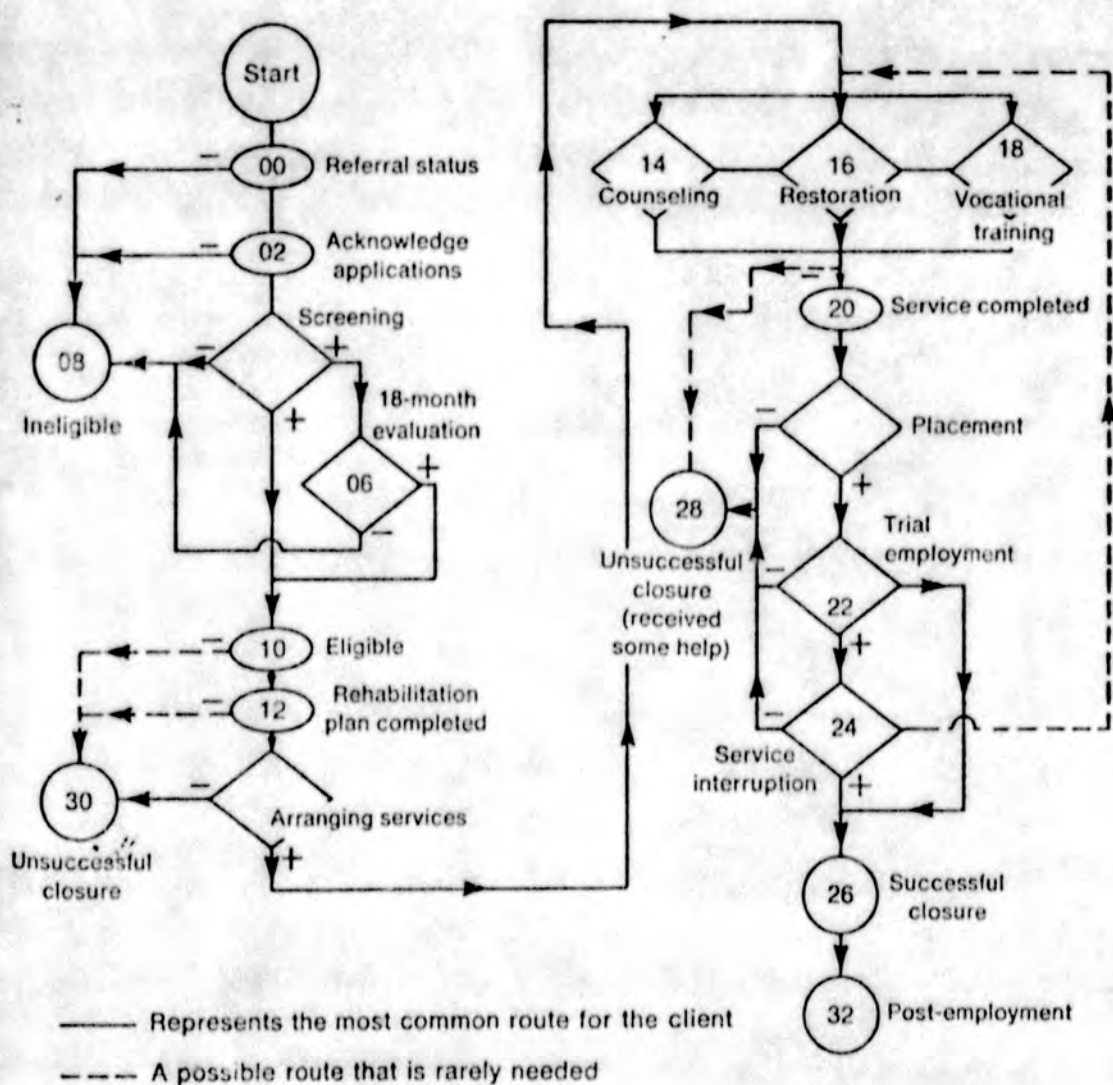


FIG. 3-1

Flow diagram of the rehabilitation process. (Modified from Leary, P.A., & Tseng, M. S. The vocational rehabilitation process—explained. *Journal of Rehabilitation*, 1974, 40[1], 9, 34.)

Background

Status 26 represents closed, rehabilitated. This status is the end result of the successful rehabilitation process. To be closed as successfully rehabilitated, the client must have been declared eligible for rehabilitation services, must have received appropriate diagnostic and related services, must have had an Individualized Written Rehabilitation Program, must have completed the program of services, and finally must have been determined to be suitably employed for a minimum of 60 days.

Status 28 indicates that the client's case is closed for other reasons after the Individualized Written Rehabilitation Program was initiated. Cases closed in this status have met the eligibility criteria for services and have been provided at least one of the services of the rehabilitation program but the client has not become successfully employed.

Status 30 represents cases closed for other reasons before the Individualized Written Rehabilitation Program was initiated. Such clients have been accepted for rehabilitation services but have not progressed to the point where any services were actually implemented under the Individualized Written Rehabilitation Program.

Status 32 is a postemployment service phase for assisting rehabilitated clients in maintaining employment. Any rehabilitation service that relates to the client's original goal and does not entail a new comprehensive effort may be provided.

Preliminary diagnostic study

A preliminary diagnostic study is conducted in the public program during the application stage of the rehabilitation process in order to determine whether the individual is eligible for rehabilitation services. This preliminary diagnostic study is for the purpose of determining whether the individual has a physical or mental disability which constitutes a substantial handicap to employment and whether services may be expected to help him achieve employment.

If the benefits of service cannot be anticipated on the bases of the preliminary diagnostic study, an extended evaluation of rehabilitation potential can be conducted to make such a determination. In all cases this preliminary diagnostic study includes a general health examination. If the client has a mental or emotional disorder, an examination must be provided by a psychiatrist or a licensed psychologist (Department of Health, Education, and Welfare, 1974).

Thorough diagnostic study

For each client in the public rehabilitation program, a thorough diagnostic study must be conducted to determine which services are needed. This comprehensive evaluation can include medical, psychological, vocational, educational, and other considerations that might relate to the person's handicap to employment. The findings of the study are then included in considering the Individualized Written Rehabilitation Program with the client.

Medical evaluation. The medical evaluation is one of the most important aspects of the evaluation process. In addition to identifying major and secondary disabilities, the medical evaluation helps identify any functional limitations or

disabilities, particularly as they apply to occupations. The medical evaluation, it is hoped, will contribute to the decision to alleviate or remove the disabling condition; to appraise the capacity and limitations of the client in terms of rehabilitation potential and goals, and for determining how services might best be provided (McGowan & Porter, 1967).

Fundamental to the medical evaluation is obtaining a medical history of the patient/client. The medical history can provide valuable information as to diagnoses and rehabilitation procedures as well as insight to social and vocational problems. As a minimum, the medical history should include identifying information about the patient/client, his chief complaint, a history of present and past illnesses, a family history, the person's habits, a vocational history, a psychosocial history, and a systemic review.

The physical examination of a disabled patient/client includes conventional anatomic and pathologic data and information regarding the person's functional capacities. Basically the physical examination considers the disabled individual's general appearance, the head and the neck, the cardiovascular, respiratory, gastrointestinal, genitourinary, and the neuromuscular and locomotor systems. In cases of physical disability, the examining physician should include tests of muscle strength and range of motion of joints and an evaluation of the person's ability to perform daily living activities (Rusk, 1977).

The determination of rehabilitation program eligibility and subsequent services is the responsibility of the rehabilitation counselor in the federal-state program. Thus the state rehabilitation agencies employ medical consultants (M.D.s) to assist counselors. Consistent and regular medical consultation is needed during the rehabilitation process for clarification of terminology in reports, assessing medical feasibility and treatment results, and obtaining advice concerning medical management problems and the need for specialist exams.

Psychological evaluation. The primary purposes of psychological evaluations are to determine the nonphysical abilities and limitations of the disabled person and to identify attitudes, interests, motivations, and personality variables which will affect the formulation of an Individualized Written Rehabilitation Program and subsequent rehabilitation services. Psychological measures should be administered for specific purposes since not all abilities or all facets of personality are necessarily important for the rehabilitation of an individual (Rusk, 1977).

When psychological measures are used for determining rehabilitation potential and direction, it is important to remember that test information serves only as an aid in decision making. Thus the user of psychological information should attempt to cross validate information and seek patterns in the assessment data. It is generally useful to place test information for a client into perspective by including previous experiences and behavior. Many rehabilitation clients are also handicapped by emotional problems related directly or indirectly to their disability. The user of psychological information should then seek information regard-

ing the client's reaction to the disability, feelings toward adjustment to the disability, and the effect of this disability upon his social adjustment in the community (McGowan & Porter, 1967).

Thus psychological evaluation involves assessing many variables which may help identify behavioral patterns and integrating this information into an Individualized Written Rehabilitation Program of services that can lead to successful adjustment and gainful activity by the client.

Sociocultural evaluation. Social and cultural information about a rehabilitation client is an integral part of planning in the rehabilitation process. A complete understanding of the client's disability necessitates learning the extent of disability and the nature of his reactions to this and other life experiences (McGowan & Porter, 1967).

A social and cultural evaluation generally involves obtaining a social history. This social history includes identifying information about the client, referral information, information about the client's present and previous medical history, a personal and family history (including information about the general climate of the home), an educational history, a work history, and information regarding the client's personality and habits and economic situation (McGowan & Porter, 1967).

When the total picture of the disabled person is being developed, it is also important to place all evaluation information into a cultural and environmental context. Individuals are a part of the constellation of factors inherent in their physical, social, and cultural surroundings and are influenced by the interaction between genetic endowments and the environment. Thus an understanding of a client's background and environment can help to more clearly discern the rehabilitation needs. Sociocultural information is usually obtained through an interview with the client. However, it can also be obtained, in part, by review of social service reports and anecdotal records that might be available. Additional sources are significant others in the disabled client's life: family, friends, teachers, and employers. The client's own social insights, skills, attitudes, and motivations are significant to an understanding of his self-perceptions and relationships to family members as well as to the community.

Vocational evaluation. In its broadest meaning, vocational evaluation includes all medical, psychological, social, cultural, vocational, and educational information which helps to define the rehabilitation client's problems and development of his vocational potential. As used here, however, it will pertain more narrowly to information and techniques for specifically assessing vocational aptitudes, potentials, and prognosis.

The best predictor of future performance is still past performance. Thus, for clients with a work history, information about previous jobs—including work habits, interests, attitudes, areas and degrees of responsibility, and relationships with other employees and with supervisors—represents very important pieces of vocational evaluation information.

For clients without a previous work history, the rehabilitation counselor must rely on assessments of the client's aptitudes and expressions of job interest and aspirations in predicting vocational potential. There are many paper-and-pencil measures and inventories to assess aptitudes and interests. In addition, there are work evaluation procedures which are helpful. The use of work samples, i.e., isolated work tasks that can be compared with standards for employed workers, is a common practice in rehabilitation. Situational assessment is another. The latter involves placing the rehabilitation client in a simulated or real work environment and assessing performance and behavioral adjustment. Another approach to vocational evaluation is to begin with an analysis of the job involving the identification of job requirements and the necessary worker traits for performance of the job and then relating the qualifications of the client to these requirements.

Perhaps the most useful approach to vocational evaluation is job-site rotation. When clients are placed in actual job situations for short evaluation periods, the advantages inherent in a previous work history are attained. Job-site evaluations offer the opportunity to test a client's interests, aptitudes, relationships to supervisors and other employees, and adjustments to varying work environments.

Educational evaluation. The educational evaluation process represents an attempt to identify the learning experiences of the disabled individual so his attitudes, knowledge, skills, and motivations can be understood. The primary purpose of an educational evaluation, of course, is to relate the disabled individual's repertoire of skills to vocational potential and goals. The educational evaluation for a client should include a determination of the attained level of education, including special areas of interest and achievement, an indication of learning capacity, information regarding study habits, an assessment of psychological reactions to educational situations, and information regarding extracurricular activities as they relate to learning.

In most cases, obtaining evidence of previous learning experiences will necessitate a visit to schools to examine school records and perhaps have conferences with school counselors and teachers. It may also necessitate administering educational tests to obtain a correct assessment of the individual's knowledge and capacities. Consideration of the individual's educational achievements in other than academic areas is also essential for evaluation of the client's potential for vocational adjustment and a fuller life after rehabilitation.

Extended evaluation

In the event that a determination of rehabilitation potential cannot be immediately made for an applicant but a physical or mental disability which is a handicap to employment has been established, the public program provides for an extended evaluation period. This extended evaluation cannot, however, exceed 18 months. By the end of 18 months, a decision must be made regarding an applicant's eligibility or ineligibility for rehabilitation services in the public pro-

Background

gram. Only one extended evaluation period can be permitted for each client unless a handicapped individual's needs have been determined to have significantly changed. In decisions of ineligibility, so the rights of individuals to service by the public program will be protected, it must be determined beyond any reasonable doubt that an applicant cannot be expected to benefit in terms of employability (Department of Health, Education, and Welfare, 1974).

Individualized Written Rehabilitation Program

The Individualized Written Rehabilitation Program (IWRP) is a plan jointly developed by the rehabilitation counselor and the handicapped person or, if the person is incapable of independent judgment, the parent, guardian, or appropriate representative. It is a continuously developed plan for each eligible applicant for rehabilitation services or individual in extended evaluation.

The primary emphasis in developing an IWRP is on the determination and achievement of a vocational goal. As a minimum, the IWRP includes (1) the basis for determination of eligibility or extended evaluation, (2) a long-range employment goal, (3) intermediate rehabilitation objectives related to the attainment of the employment goal, (4) identification of specific vocational rehabilitation services necessary to achieve the employment goal, (5) the expected date for initiation of each service and the anticipated duration of these services, and (6) a procedure and schedule for evaluation of progress toward the rehabilitation objectives and the employment goal. In addition, the client or an appropriate representative must be involved in the development of the plan and be informed of his rights and appeal procedures if dissatisfied (Department of Health, Education, and Welfare, 1974).

Counseling and guidance

Though counseling and guidance are integral parts of the provision of most services in rehabilitation, they may also be a distinct and separate service. As has been mentioned, when counseling is the only service needed by the client in addition to job placement the client is considered to be in status 14.

Counseling is the synthesizing function of the rehabilitation process (Malikin & Rusalem, 1969). It is the function which addresses the holistic nature of humans. It is also the counseling function that integrates separate disciplinary practice into a comprehensive approach for serving the individual. Though there are many counseling theories and techniques advocated, there are many more similarities than differences among these. The ultimate goal of counseling is a helping relationship between the counselor and the counselee culminating in improved client function.

Physical and mental restoration

Physical and mental restoration refers to health-related services that are important to correct physical or mental conditions which interfere with optimal

functioning of the rehabilitation client. Examples might be medical, physical, and therapeutic treatment, and/or prosthetic appliances. It can include the many services of physical medicine, physical therapy, occupational therapy, communication therapy, rehabilitation nursing, orthotics and prosthetics, and psychiatry (Department of Health, Education, and Welfare, 1974; Rusk, 1977).

Training

In rehabilitation, training refers to the broad range of learning opportunities and experiences which will help the client progress to the employment goal of the Individualized Written Rehabilitation Program. Jarrell (1972) classifies rehabilitation training into four broad areas: (1) personal adjustment training, (2) prevocational training, (3) compensatory skill training, and (4) vocational training.

Personal adjustment training refers to the development of habits and attitudes which are related to adjustment in the world of work. Examples are dependability, responsibility to others, tolerance, consistency, and capacity for time considerations (Bitter, 1968). *Prevocational training* refers to the background knowledge needed to select and become ready for occupational skill development. It is a preparatory stage for vocational skill training. Program examples are familiarity with occupations through field tours, job-site rotation, and reading. It also includes learning to complete employment applications, using public transportation, and managing an income. Many work adjustment programs combine personal adjustment training and prevocational training. *Compensatory skill training* refers to the development of personal skills that compensate for disability and that may be important for employability. Examples are speech reading, gait training, and mobility training for the blind. *Vocational training* involves the development of specific job skills. These skills may be obtained in numerous ways—through trade and vocational schools, colleges and universities, apprenticeship programs, rehabilitation facilities, sheltered workshops, and on-the-job training.

Job placement

In a vocationally oriented program, job placement represents the culmination of the entire rehabilitation process. Job placement is important in the restoration of an individual to the highest level of functioning of which he is capable. To have been a successful process, the employment situation must be commensurate with the abilities, interests, and potential of the rehabilitated client. Job placement is very complex and often underrated, involving matching the individual to the appropriate job. The process necessitates recognizing relationships between client variables and work environment variables. The former include both personal factors and job skill factors; the latter are all the considerations inherent in the job.

No two work environments are exactly alike (Bitter, 1968). Thus effective job placement requires that the rehabilitation counselor or placement specialist have a thorough knowledge of the community and its resources. In addition, the professional worker must be skilled in job analysis to be able to understand the requirements of the job. Job engineering may also be involved, entailing minor job modifications to help the employer and client fully benefit from the client's skills. It should be noted, however, that job placement is a mutual responsibility of the rehabilitation counselor and client which is considered early in the rehabilitation process. The counselor and the client must work together if they are to effect a vocational outcome that will truly reflect the restoration of the client to his fullest level of vocational functioning.

Postemployment services

Postemployment services are provided in the rehabilitation process after clients are vocationally rehabilitated to assist them in maintaining employment. Postemployment service might be any rehabilitation service(s); but activities should be related to the client's original Individualized Written Rehabilitation Program.

At a minimum, continued counseling may be essential; however, postemployment service may also include any rehabilitation service that does not entail a complex or comprehensive new rehabilitation effort. Such postemployment services may be either a one-time performance or a combination extended over a period of time. There is no limit on the duration of postemployment services in the public rehabilitation program. Some examples of postemployment services are supplementary training resulting from a change in job requirements, health services, arrangements with other agencies for home help, wheelchair repair, and transportation subsidy if needed (Department of Health, Education, and Welfare, 1974; West Virginia Research and Training Center, 1975).

Other services

Maintenance support, through financial payments, may be made available to clients to cover their basic living expenses—including food, shelter, clothing, and any other subsistence that may be important for achieving the rehabilitation goal of the handicapped person.

Transportation support may also be provided to rehabilitation clients to make possible the provision of services. Relocation and moving expenses are also available if related to the achievement of rehabilitation goals.

Services to *family* members of a handicapped individual are oftentimes important for the adjustment of clients to their rehabilitation goals. This and any other *support* service may be provided in the public rehabilitation program if important to the individualized rehabilitation process. Examples of support services are supervision and management for small business enterprises (consulta-

tion, accounting, inspection, etc.), occupational licenses (needed to enter an occupation or a small business), tools, equipment, and supplies, interpreters for the deaf, readers and mobility service for the blind, technological aids and devices, and any assistance which might benefit the handicapped individual in achieving employability.

REHABILITATION PROGRAMMING

Client selection and priorities

The Rehabilitation Act of 1973 required that state rehabilitation agencies establish priorities for serving the handicapped. This, of course, is necessary only if the agency is unable to provide services to all who apply and are eligible or who are in need of an extended evaluation of rehabilitation potential to determine their eligibility. First priority must, according to legislation, be given to the most severely disabled. The 1973 legislation intended that this group should not be denied services or be delayed or deferred because of the complexity of the case, the cost, or the time it takes to successfully rehabilitate a severely disabled person. State agencies may, however, assign subsequent priorities to other disabling conditions, depending on local areas of concern.

Outcome and service goals

After the identification of client selection priorities, state rehabilitation agencies are required to establish outcome and service goals for each priority group. Thus, at a minimum, a state agency must establish such outcomes and service goals for the severely disabled. These must be stated in terms that are measurable. For example, if an agency goal is to expand rehabilitation services to spinal cord injured clients, then a measurable objective might be to serve 15% more severely disabled spinal cord injured clients during the next 12 months. To be useful, agency goals should generally be expressed in terms which can provide for service expansion or program improvement. An example might be to develop new service delivery resources or improve referral procedures or methods to expedite service delivery. Thus the establishment of outcomes and service goals becomes a policy and planning function of rehabilitation agencies (West Virginia Research and Training Center, 1974; Rehabilitation Services Administration, 1975a).

Individualized Written Rehabilitation Program

The Individualized Written Rehabilitation Program (IWRP) was mentioned earlier in this chapter under the "Sequence of Rehabilitation Services." The IWRP is a case planning and management tool. It identifies the basis for determination of eligibility or need for extended evaluation. It also identifies the terms and conditions of the program, for example, client financial participation, availability of rehabilitation funds, availability of class openings in training programs,

any potential possibilities for delay in implementing the program and client responsibilities. If there is dissatisfaction with the provision of services, the rights of the client for an administrative review and a fair hearing are also noted. The IWRP is signed by the rehabilitation counselor or other representative of the agency and the client receives a copy. The IWRP may be amended with any appropriate change anytime during the rehabilitation process; again with client involvement.

The Individualized Written Rehabilitation Program represents a plan of action and a statement of mutual understanding. Though the client is not compelled to sign the IWRP or its amendments, the program should be developed with the client's full participation, understanding, and acceptance. In addition to specifying the basis for applicant eligibility for service, the IWRP contains five primary service-related content areas—including a long-range employment goal, intermediate rehabilitation objectives, specific rehabilitation services, duration of services, and evaluation of progress.

The *long-range employment goal* represents the aim of the rehabilitation process. It is the ultimate realistic vocational achievement of the client and should be based on his interests, abilities, and physical and mental potential. Formulation of a long-range employment goal offers the potential of a goal-directed activity which gives continuous consideration to job placement rather than serves merely as one step at the end of the rehabilitation process.

Intermediate rehabilitation objectives represent the series of steps designed to help the client achieve the long-range employment goal. Examples of objectives might be physical restoration, personal adjustment, and the development of vocational skills.

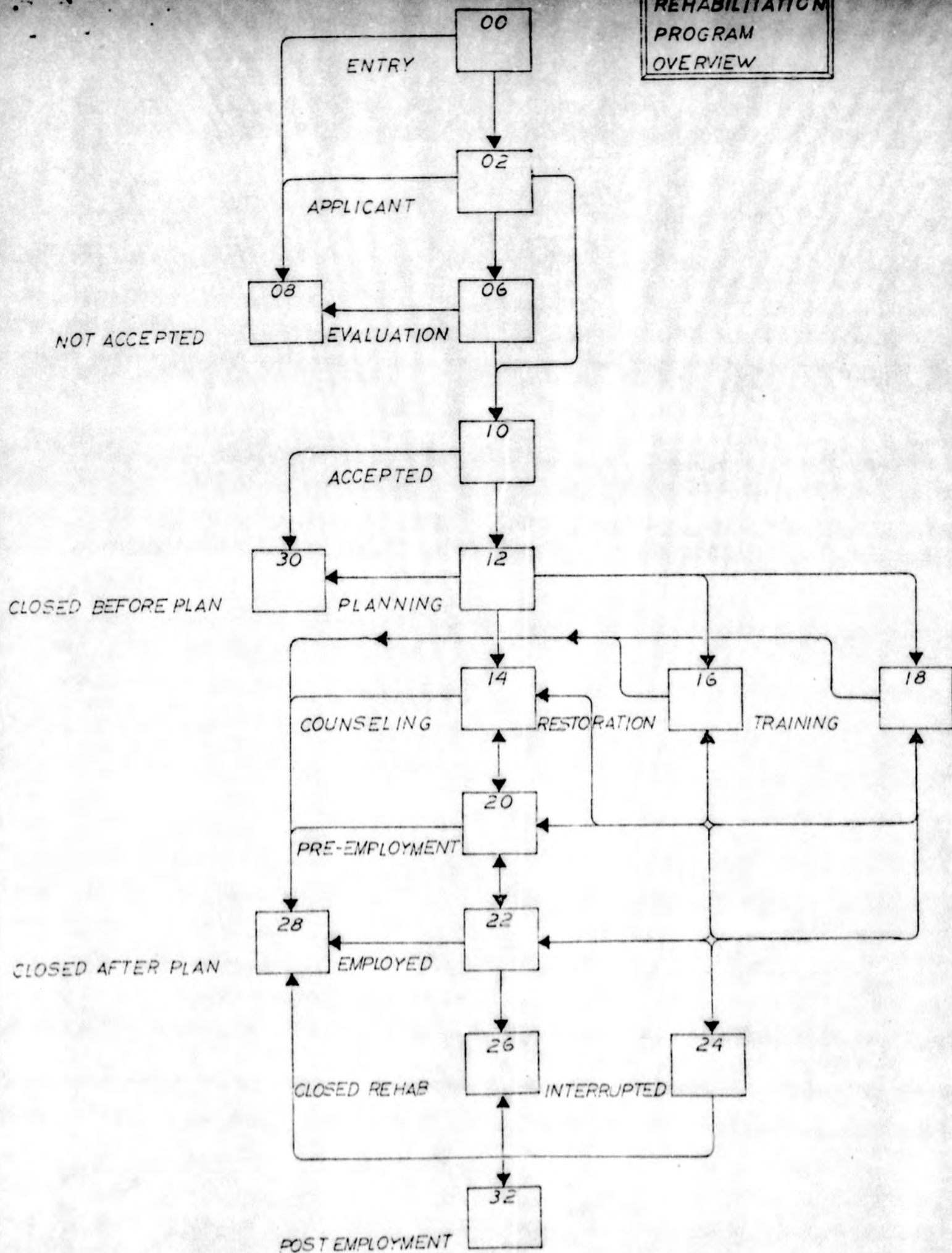
The IWRP also identifies *specific rehabilitation services* directly related to achievement of the intermediate rehabilitation objectives and the vocational goal. Examples might be physical therapy, adjustment counseling, vocational training, purchase of a wheelchair, or development of skills for independent living. However, where possible, the statement of rehabilitation services to be provided to the client should be specific.

The *duration of services* is also specified in the IWRP for each of the planned services. The anticipated date for initiation of each service should be identified and scheduled in a manner which will maximize the benefits of an orderly, sequential rehabilitation process.

The last content area of the IWRP is *evaluation of progress* toward attainment of the long-range employment goal. To be useful, the IWRP ought to outline the criteria for evaluating client progress. Factors that can be used to assess progress include counselor assessments, self-reports of the client, training progress reports, grades, and medical reports. A formal review of the IWRP is required by public program regulations at least annually. However, a review of progress should be a continuous process and formal sessions may be conducted

at any time and may be initiated by either the counselor or the client. The results of such reviews should be recorded and the IWRP redeveloped or amended as appropriate. A number of alternatives are available in the event the client is not making satisfactory progress toward attainment of intermediate objectives and the long-range goal. The levels of achievement may be reconsidered, the appropriateness of the objectives may be reevaluated, the dates for achievement of objectives may be reset, or if necessary services may be terminated (Rehabilitation Services Administration, 1975b).

REHABILITATION PROGRAM OVERVIEW



3005.01 Purpose and Legal Authority

Statistical reporting under the State-Federal Program of Vocational Rehabilitation is sponsored by the Rehabilitation Services Administration (RSA) and conducted under the auspices of the National Center for Social Statistics (NCSS) acting as the collecting and processing agency for RSA-sponsored reports. This section contains copies of the required statistical reports and instructions for preparing them.

Section 101(a)(10) of the Rehabilitation Act of 1973 and Section 401.20 of the Interim Regulations dated January 3, 1974 which implement the Act, relate to the submittal of reports.

3005.02 Caseload Statuses

There are 15 status classifications under the caseload status coding structure coded in even numbers beginning with 00 and ending with 30 (excluded is code 04). Reporting on all statistical forms is based on one or more of the caseload statuses.

Status 00. REFERRAL. This status represents entrance into the vocational rehabilitation process. A referral is defined as any individual who has applied to or been referred to the vocational rehabilitation agency by letter, by telephone, by direct contact, or by any other means; and for whom the following minimum information has been furnished: (1) name and address, (2) disability, (3) age and sex, (4) date of referral, and (5) source of referral.

It should be noted that it is not intended to include in the definition of "referrals" those individuals included in long lists of persons who are "screened out" by criteria established in a cooperative agreement between the vocational rehabilitation agency and another agency. However, all those cases not screened out by the established criteria should be recorded and reported, not just the cases which appear to have good vocational rehabilitation potential after counselor investigation.

All cases must be recorded and reported as referrals for Form SRS-RSA-101 and Form SRS-RSA-300 purposes as soon as the above basic, minimum information is available. Recognition of this basic principle by all

counselors and all State vocational rehabilitation agencies is essential. Referrals should be recorded on these forms even though the counselor may close out the referral almost immediately as not being eligible for services.

Status 02. APPLICANT. As soon as the referred individual (Status 00) signs a document requesting vocational rehabilitation services, he is placed into Status 02 and is designated as an applicant. Generally, the document will be an agency application form, but a letter signed by an individual who provides the minimum basic referral information and requests service should also be considered as a basis for placing the individual in Status 02. This is important, since the applicant must be notified in writing if his request for VR services has been denied, and the only certain basis for determining that the individual has knowledge of having been referred is by the existence of a document signed by the individual.

While the individual is in Status 02, sufficient information is developed to make a determination of eligibility (Status 10) or ineligibility (Status 08) for vocational rehabilitation services, or a decision is made to put the individual into extended evaluation (Status 06) prior to making such a determination.

Status 06. EXTENDED EVALUATION. An applicant should be placed in this status when the counselor has certified the applicant for extended evaluation. Individuals placed in this status may not remain in the status longer than eighteen consecutive months from the date of certification but may be moved from this status to either Status 10 or 08 at any time prior to the expiration of the 18-month period if it is determined that, either (a) there is a reasonable expectation that the individual can benefit in terms of employability (Status 10), or (b) there is no reasonable likelihood that he can benefit in terms of employability (Status 08). No time allowances can be made for interruptions during this period regardless of the nature of, or reason for, the interruptions.

Prior to or simultaneously with acceptance of an individual for services for purposes of determination of rehabilitation potential (extended evaluation), there will be a certification of: (1) the presence of a physical or mental disability, (2) the existence of a substantial handicap to employment, and (3) the inability to make a determination that vocational rehabilitation services may benefit the individual in terms of employability. An individualized written rehabilitation program is required concurrently with or reasonably soon after execution of the certificate of eligibility for extended evaluation services.

Status 08. CLOSED FROM REFERRAL, APPLICANT, OR EXTENDED EVALUATION STATUSES. This status has been provided to furnish a means for identifying all persons not accepted for vocational rehabilitation services, whether closed from referral status (00), applicant status (02), or extended evaluation (06). All persons processed through referral, applicant, and/or extended evaluation, and not accepted into the active caseload for vocational rehabilitation services, will be closed in this status. A certificate of ineligibility is required for a closure in Status 08, except when the client becomes unavailable for services. A copy of the Form SRS-RSA-300, properly completed, dated, and signed is sufficient certification of ineligibility for these cases, provided case documentation includes specific detailed reasons for the closure action. See Page 75 for additional instructions concerning closure of cases.

ACTIVE CASELOAD STATUSES

An individual who has been certified as meeting the three basic eligibility requirements is accepted for vocational rehabilitation services, designated as an active case, and placed in Status 10. Eligibility for vocational rehabilitation services is based upon: (1) the presence of a physical or mental disability; (2) the existence of a substantial handicap to employment; and (3) a reasonable expectation that vocational rehabilitation services may benefit the individual in terms of employability.

After an individual has been accepted and his case placed in the active caseload, the case study is completed, an individualized written rehabilitation program is developed,

and the appropriate services are provided, including follow-up prior to case closure to insure the suitability of employment.

The following statuses are designed to provide counselors, district supervisors, and State agency management personnel with a uniform method for recording individual case progress and caseload management information. It may be noted that there are no national reporting requirements for applying these statuses to cases in extended evaluation. However, any large-volume agency desiring to establish case progress identification for their evaluation cases can easily do so by prefixing the following statuses with a "6" to signify status changes during extended evaluation.

Status 10. INDIVIDUALIZED WRITTEN REHABILITATION PROGRAM DEVELOPMENT. While a client is in this status, the case study and diagnosis is completed to provide a basis for the formulation of the individualized written rehabilitation program. A comprehensive case study is basic to determining the nature and scope of services to be provided in order to accomplish the vocational rehabilitation objective of the individual. The counselor and client formulate and plan the rehabilitation services necessary to the solution of the client's problems, and those services are clearly outlined to him. The individual remains in this status until his rehabilitation program is written and approved.

Status 12. INDIVIDUALIZED WRITTEN REHABILITATION PROGRAM COMPLETED. A case is placed in this status when the individualized program has been written and approved. The case remains in this status until at least one arrangement has been made to supply a necessary service and the service has been actually initiated. In those instances where the program as written and approved provides for counseling, guidance, and placement only, the client may be moved immediately after program approval into Status 14 since counseling is a continuing process.

THE IN-SERVICE STATUSES (Statuses 14, 16, and 18). These service statuses are provided for case progress designations to indicate the kind or kinds of services given to the client to prepare him for employment.

In those instances where a client receives restoration and training services simultaneously, the client should be identified by the service which is running for the longer period of time. In those instances where both services run concurrently for the same time period, the counselor must use his professional judgment in assigning the case to the status which is most important to that particular case.

Status 14. COUNSELING AND GUIDANCE ONLY. It is intended that this status be used only for those cases having an approved program which outlines counseling, guidance, and placement as the only services required to prepare the client for employment. It is not to be used to reflect the counseling and guidance which take place during the course of program development or provided by the counselor during the progress of training, or physical or mental restoration. However, within the context of the meaning and intent above, in those instances where there has been a breakdown in the case progress after other services have been provided, and it has been determined by the counselor that substantial counseling and guidance is essential to the successful placement and rehabilitation of the individual, the client may be entered in this status, provided that a program amendment has been written and approved after consultation with the client and that this is the only additional service required to prepare the client for employment.

Status 16. PHYSICAL AND MENTAL RESTORATION. A client is placed in this status if he is receiving any physical or mental restoration services such as medical, surgical, psychiatric or therapeutic treatment, or is being fitted with an appliance. A case remains in this status until physical and mental restoration services are completed or terminated.

Status 18. TRAINING. A client is placed in this status if he is actually receiving academic, business, vocational or personal and vocational adjustment training from any source such as a public or private school, a commercial or industrial establishment, a rehabilitation or other facility, by an individual

teacher or instructor, or by correspondence. Clients remain in this status until the training is either completed or terminated.

Status 20. READY FOR EMPLOYMENT. A client is placed in this status when he has completed preparation for employment (counseling, guidance, treatment, fitting of an appliance, training, etc.) and is ready to accept a job but has not yet been placed, or has been placed but has not yet begun employment. For example, "June graduates" with teaching contracts, who will not begin employment until September, should be placed in this status for Federal reporting purposes.

Status 22. IN EMPLOYMENT. A client is placed in this status when he has been prepared for, been placed in, and begun employment. He must be observed in this employment for a minimum of 30 days prior to being closed rehabilitated (Status 26) to insure adequacy of employment in accordance with the needs and limitations of the individual. Homemakers and unpaid family workers should be included in this status while they meet the observation criteria.

Status 24. SERVICE INTERRUPTED. A client is recorded in this status if services are interrupted while he is in one of the Statuses 14, 16, 18, 20, or 22. Such cases are then held in this status until the client returns to one of the aforementioned statuses or until the case is closed.

ACTIVE CASELOAD CLOSURE STATUSES

A client remains in the active caseload until he has completed his individualized written rehabilitation program or until it has been terminated. Cases closed from the active caseload are classified in one of the three following categories.

Status 26. CLOSED REHABILITATED. Cases closed as rehabilitated must as a minimum (1) have been declared eligible, (2) have received appropriate diagnostic and related services, (3) have had a program for vocational rehabilitation services formulated, (4) have completed the program insofar as possible, (5) have been provided counseling as an essential rehabilitation service, and

(6) have been determined to be suitably employed for a minimum of 30 days. See page 75 for additional instructions concerning closure of cases.

Status 28. CLOSED OTHER REASONS AFTER INDIVIDUALIZED WRITTEN REHABILITATION PROGRAM INITIATED. Cases closed in this category must have met the criteria (1), (2), and (3) above, and at least one of the services provided for by the program must have been initiated, but for some reason one or more of criteria (4), (5), and (6) above were not met (closures from Statuses 14 through 24). Included here are cases which are transferred to another State rehabilitation agency, either within the State, or in some other State. Also included here are those cases for which a rehabilitation program for counseling and guidance only was written, approved, and initiated. See page 75 for additional instructions concerning closure of cases.

Status 30. CLOSED OTHER REASONS BEFORE INDIVIDUALIZED WRITTEN REHABILITATION PROGRAM INITIATED. Cases closed in this category are those cases which, although accepted for rehabilitation services, did not progress to the point that rehabilitation services were actually initiated under a rehabilitation plan (closures from Status 10 or 12). Included here are cases which are transferred to another State rehabilitation agency, either within the State, or in some other State. See page 75 for additional instructions concerning closure of cases.

counseled as to how these provisions will operate to his advantage, in order to strengthen his motivation for undertaking rehabilitation. The VR counselor should also assure that the client-beneficiary understands there is a suspension of benefits for any month in which rehabilitation services are refused without good cause.

3508.02 Trial Work Period

Whether he enters into rehabilitation through his own efforts or with the help of the State vocational rehabilitation agencies (or other agencies), when the disabled worker or childhood disability beneficiary who has not recovered attempts to work, he may continue to receive benefits for himself and his family for nine months while testing out his earning capacity and ability to sustain work. (See 3508.025, when medical recovery is involved.) Not until after a beneficiary has performed "services" in each of nine months (which may or may not be consecutive) will a decision be made as to whether the beneficiary has shown that he has regained his ability to work. If, after nine months of services, it is decided that the beneficiary is able to engage in substantial work and, therefore, is no longer disabled within the meaning of the law, he will still be paid benefits for an additional three months, making twelve months of trial work and adjustment in all. (Note: The trial work period provisions do not apply to disabled widows, widowers, or surviving divorced wives.) It is not possible to predetermine if a beneficiary may be entitled to a trial work period. Caution should be used in counseling the client about the trial work provisions.

A month in which a beneficiary works will count as a month of services in the computation of the trial work period if:

- a) The beneficiary's earnings derived from employment are more than \$50 in such month, or
- b) The beneficiary's earnings from self-employment activities are more than \$50 in such month, or he spends more than 15 hours in such month in self-employment activities.

After expiration of the trial period, an evaluation is made of the disabled person's work effort. The decision to terminate or to continue benefits after the trial work period will depend upon the finding of ability or inability of the person to engage in substantial gainful activity.

3508.021 Substantial Gainful Activity

For the purpose of establishing eligibility for disability benefits under the Disability Insurance Program, "Substantial Gainful Activity" means, "...the performance of significant duties over a reasonable period of time in work for remuneration or profit or in work of a type generally performed for remuneration or profit..."

Regardless of the severity of the impairment, disability insurance benefits are not payable to a person who engages in substantial gainful activity. The following earnings guidelines apply for determining substantial gainful activity:

- A. Earnings averaging more than \$200 a month are deemed to demonstrate ability to engage in substantial gainful activity, in the absence of evidence to the contrary. If the earnings include a subsidy reducing the true earnings to less than \$200 a month, substantial gainful activity would not be found. SSA will investigate for the possibility of a subsidy existing in reported wages for the following:
 - a) Sheltered employment, or
 - b) Childhood disability or mental impairment, or
 - c) Marked discrepancy between wages and apparent value of services, or
 - d) Allegations that pay is not wholly earned.

DESK AIDE
Application of the Special Selection Criteria (SSC) for the SSDI/SSI-Funded VR Programs (Refer to RS Manual)



¹ DEFINITION OF SGA FOR VR PURPOSES DURING 1978 (CHANGE SGA AMOUNT YEARLY AS PER RSA INSTRUCTION)

\$230 Per month of unsubsidized remuneration from employment or self-employment.
\$333 Per month for those allowed SSDI benefits because of legal blindness.

² EXAMPLES OF SITUATIONS REQUIRING CAREFUL CONSIDERATION OF SSC NO. 1

Do not certify any condition which is likely to cause rapid (within 2 years) deterioration of the ability to sustain SGA. The following are examples of conditions which should not be certified without medical consultation.

Medical Consultation

- A. Cancer that is inoperable; recurrent after radical surgery; not controlled by prescribed therapy; or marked by distant metastasis.
- B. Chronic Cor Pulmonale, chronic severe congestive heart failure.
- C. Far advanced Cirrhosis of the liver.
- D. Marked irreversible ventilatory loss resulting in bed or chair confinement.
- E. Multiple Sclerosis with severe neurological signs.
- F. Rheumatoid Arthritis with severe overall anatomical deformity.
- G. Arteriosclerosis Obliterans or advanced ASHD.
- H. Uncontrolled Diabetes Mellitus with organ involvement; amputation; blindness; frequent acidosis; or, severe neuropathy.



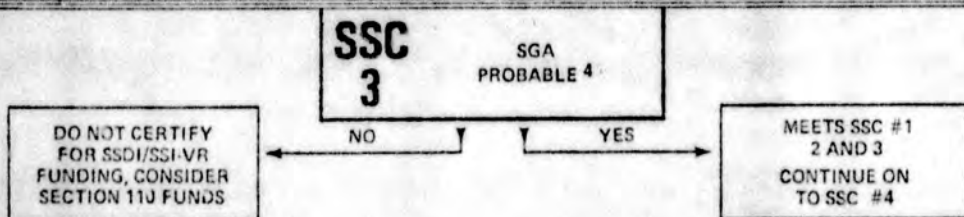
³ EXAMPLES OF SITUATIONS NOT MEETING SSC NO. 2 OR REQUIRING CAREFUL CONSIDERATION ARE BELOW

Do Not Certify

- A. Beneficiary has reached or will reach a level of improvement (e.g. fracture healed, recovered from mental condition, tuberculosis controlled) leading to termination without VR services.
- B. Beneficiary already receiving restorative services when referred to VR (e.g., surgery). These services likely to result in termination.
- C. Beneficiary already in SGA level employment when referred to VR and no evidence beneficiary requires VR services to continue in SGA.

Careful Consideration

- A. Re-examination diary (ARD) established must have medical evidence to rebut: (consultation or recent (within last 6 months) medical evidence in file.)
- B. MAD not established or diary status unknown but medical recovery expected, must have medical evidence to rebut: (consultation or recent (within last 6 months) medical evidence in file.)



⁴ EXAMPLES OF SITUATIONS NOT MEETING SSC NO. 3 OR REQUIRING CAREFUL CONSIDERATION ARE BELOW

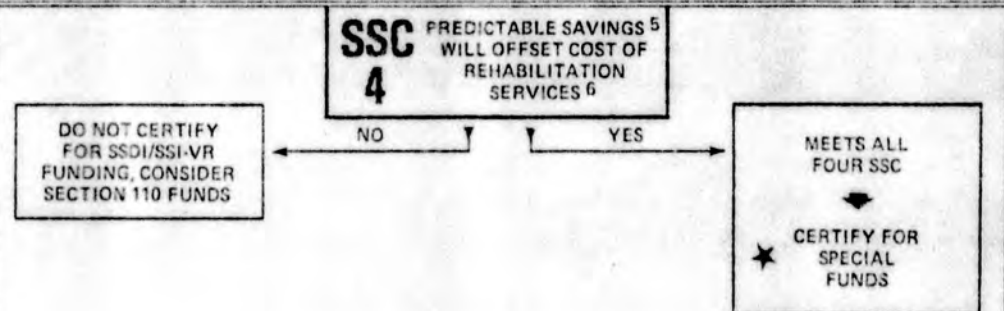
Do Not Certify

- A. Impairment so severe as to make SGA unlikely (e.g., severe mental retardation, severe physical handicap, severe psychiatric evaluation of functional ability). as evidenced by psychological.
- B. Vocational objective not SGA (e.g., homemaker, unpaid family worker).

Careful Consideration

- A. Self-employment (rarely results in SGA).
- B. Sheltered work (rarely results in SGA).
- C. Occupations such as baby-sitting, artwork, gardening, woodworking, etc. (rarely result in SGA).

NOTE: CRITERION NO. 3 CANNOT BE MET BASED ON A BROAD VOCATIONAL GOAL (e.g., UNSKILLED LABOR, COLLEGE EDUCATION, OFFICE WORK) - MUST BE A SPECIFIC VOCATIONAL OBJECTIVE (e.g., CARPENTER) OR SEVERAL OPTIONS UNDER A SPECIFIC OBJECTIVE (e.g., CLERICAL - SECRETARY, TYPIST)



⁵ DEFINITION OF SAVINGS

Disability benefits that won't be paid to the client because client was rehabilitated to SGA and removed from the disability rolls.

⁶ METHOD FOR COMPUTING OFFSET

Beginning with the month the client is expected to be removed from the disability rolls (usually 12th month of work activity), client is likely to continue in SGA for (a) _____ months before retirement at age 65.* The discontinuance of monthly benefits of (b) \$----- would result in a savings of (a) x (b) \$----- to the trust funds or SSI funds offsetting the rehabilitation case service costs of (c) \$-----. If (c) exceeds (a) x (b), do not certify.

* IF THE CLIENT IS SUFFERING FROM A MEDICAL CONDITION WHICH IS LIKELY TO RESULT IN WITHDRAWAL FROM SGA PRIOR TO AGE 65, MAKE A REASONABLE PROJECTION BASED ON MEDICAL CONSULTATION.

FY80 (CLOSED + ACTIVE)

	1st Injury	No 2nd Injury	TOTAL	REHABS	TRAINING
WC REFERRED	30	51	81	4	17
NON WC REFERRED	166	—	166	33	38
TOTAL	196	51	247	37	55

REHABS

FY 79

	76	78	80	08
WC REF	5	4	6	10
2ND INT	19	17	10	17
WC/2ND	3	2	2	1
TOTAL				

WC REF \$	12,432	3,356	736	2,128
TOTAL \$	47,487	19,473	1,528	1,405
WC/2ND \$	7,975	2,616	497	692

	AVERAGE	COST	
WC REF	2,846	839	213
2ND INT	2,449	1,145	83
WC / 2ND INT	7,658	1,308	692

\$509

ALL

Avg COST PER REFERENCE = 2,446

WC referral \$400 higher on average.
425 rehabs

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