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ABSTRACT

This report reviews the practices implemented by 53 different state vocational rehabilitation (VR) agencies to address quality assurance concerns. The broader spectrum of monitoring practices and evaluation systems used by different state agencies to assess worker and agency performance is first reviewed. The report then focuses on the range of procedures used to track timeliness, which has been adopted as one of the procedural standards of service quality in the revised standards evaluation system. A state-of-the-art review is presented of VR agency procedures used to identify undue delays, including some that do include case flagging components. An analysis is then presented of data regarding the timeliness of movement through the vocational rehabilitation process for a sample of closed cases. Data are from four model evaluation states: Delaware, Michigan, Oregon, and Mississippi. Timeliness is described and factors affecting timeliness are identified. A model case flagging system is recommended that periodically identifies cases to receive timeliness reviews. (An appendix with representative materials related to quality assurance and case flagging activities from state agencies is available separately.) (YLB)

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REVIEW OF STATE VR AGENCY PROCEDURES
FOR CASE FLAGGING:
A QUALITY ASSURANCE ACTIVITY

April 1983

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ABSTRACT

REVIEW OF STATE VR AGENCY PROCEDURES FOR CASE FLAGGING: A QUALITY ASSURANCE ACTIVITY, by Susan Stoddard, Ph.D., J. Mark Rogers, Shirley Langlois, Caleb Whittaker, and Deborah Kogan, Berkeley Planning Associates, April 1983, 51 pp.

This report reviews the practices implemented by 53 different state VR agencies to address quality assurance concerns. After reviewing the broader spectrum of monitoring practices and evaluation systems used by different state agencies to assess worker and agency performance, the report focuses on the range of procedures utilized to track timeliness, which has been adopted as one of the procedural standards of service quality in the revised Standards Evaluation System. The report also reviews actual findings on the extent of timely versus untimely service in four of RSA's six Model Evaluation Unit (MEU) states, based on data from a small client sample in each state. The report recommends that, rather than adopting absolute standards to define timely versus untimely completion of each status, states implement case flagging systems that would periodically identify cases to receive timeliness reviews. The report also suggests that states consider building adjustments into their timeliness flagging systems to account for variations in the expected time in status for clients with different characteristics.

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I. INTRODUCTION

A TYPOLOGY OF QUALITY ASSURANCE ACTIVITIES

This report reviews the variety of practices currently utilized by state VR agencies to carry out quality assurance functions, in general, and to ensure the timeliness of VR services at the individual case level, in particular. In most agencies, the purpose of a quality assurance program is either to monitor the quality of the services that are being provided, or to evaluate the quality of the services that have been provided. Monitoring implies close supervision of current operations; evaluation implies assessment of past performance. While most comprehensive quality assurance programs contain elements of both monitoring and evaluation systems, it is usually possible to determine which of these is emphasized in any program. For each of these types of quality assurance systems, the following aspects of agency design and implementation require attention:

- the standards or criteria used to define the ideal;
- the level within the VR agency's hierarchy at which the review is held;
- the instrument used to assess performance; and
- any other methods of assuring or evaluating service quality.

To make this review of current quality assurance practices as representative as possible, Berkeley Planning Associates sent letters requesting any materials related to quality assurance and case flagging activities to all VR agencies in the States and U.S. Territories. Of these 85 requests, 53 agencies responded with a wide variety of manuals, review instruments, and other sources of information, all directly or indirectly related to quality assurance. We welcomed this variety of materials and have reproduced representative materials from each state agency in an Appendix to this report (bound separately). While it might have been easier to summarize the responses had we requested specific information or conducted a pre-coded survey, we did not want to limit the scope of the responses by

imposing a predetermined definition of "quality assurance" on the state agency respondents. It was important to us to understand what a particular agency thought of when we requested "quality assurance" information. Using this method allowed for an indication of an agency's emphases, and yielded some interesting results.

Figure 1 demonstrates the variety of methods employed by states to control for quality and timeliness in their respective case management systems. The names of states responding to our request to send materials (describing their quality assurance and case flagging procedures) are listed in the first column. Also in this column is a code letter and number for easily identifying the corresponding materials included in the Appendix.

Figure 1 includes four columns under the heading "CASE FLAGGING," noting the different criteria used: Norm for Maximum Time in Status; Time Since Last Contact; Time in Status (no specific maximum); and Routine Review Schedule. An "x" in any of these columns indicates that the particular state in question uses that particular criterion for flagging cases. Because states differed in their practice of flagging cases in all statuses or some statuses, this information is included in parentheses in the first column.

The last two columns on Figure 1 attempt to classify each state's "QUALITY ASSURANCE APPROACH" as either "Monitoring" or "Evaluation," or both. Descriptive phrases are included in parentheses in an effort to acknowledge the variation in types of monitoring systems: in-house; use of SDCRS (San Diego's Case Review Schedule); informal; etc. Likewise, the final column, "Evaluation," includes frequency or scope of the evaluation in parentheses.

QUALITY ASSURANCE THROUGH MONITORING PRACTICES

Most of the agencies that responded to our request for information have quality assurance programs primarily devoted to monitoring current activities. One of the advantages of a monitoring program is that it allows for a quick identification of potential problems before they have a chance to become entrenched. By correcting these problems early, the

Figure 1

Examples of Methods Used for Case Flagging and Quality Assurance

STATES	CASE FLAGGING				QUALITY ASSURANCE APPROACH	
	What Criteria Are Used?				Monitoring	Evaluation
	Norm for Maximum Time in Status	Time Since Last Contact	Time in Status (no specific maximum)	Routine Review Schedule		
ALABAMA	A-1		X	X	X (in-house)	
ALASKA	A-2	X (some statuses)			X (SDCRS)	X (district-wide)
ARIZONA	A-3	X (some statuses)			X (in-house)	
ARKANSAS	A-4				X (SDCRS)	
CALIFORNIA	C-1			X	X (in-house)	
CONNECTICUT	C-2			X	X (ACCR)	
DELAWARE	D-1		X		X	
FLORIDA	F-1				X (in-house)	
FLORIDA - Blind	F-2				X (in-house)	
IDAHO	I-1	X (some statuses)			X (in-house)	
ILLINOIS	I-2		X		X (in-house)	
INDIANA	I-3				X (in-house)	X (area-wide)
IOWA	I-4	(manually flag X cases)		X	X (in-house)	
KANSAS - Blind	K-1				X (in-house)	
KENTUCKY	K-2		X		X (in-house)	X (district-wide)
KENTUCKY - Blind	K-3			X		X (every 3 months) (GNCP)
LOUISIANA	L-1	X (all statuses)			X (SDCRS)	
MAINE	M-1					X (quarterly)
MARYLAND	M-2	X (all statuses)			X	X (BPA)
MASSACHUSETTS	M-3	X (all statuses)		X	X (in-house)	
MICHIGAN	M-4	X (all statuses)		X	X (district-wide)	
MICHIGAN - Blind	M-5		X	X	X (annual)	
MINNESOTA	M-6	X (all statuses)			X (in-house)	X
MONTANA	M-7					
NEVADA	N-1				X (SDCRS)	X (elaborate)
NEW HAMPSHIRE	N-2	X (some statuses)			X (ACCR)	
NEW JERSEY	N-3	X (some statuses)			X (BPA)	
NEW JERSEY - Blind	N-4	X (some statuses)			?	
NEW YORK	N-5	X (some statuses)		X		
NEW YORK - Blind	N-6					
NORTH CAROLINA	N-7	X (some statuses)			X	
NO. CAROLINA-Blind	N-8	X (some statuses)			X	X
NORTH DAKOTA	N-9	X (some statuses)			X (10% of cases)	
OHIO	O-1	X (all statuses)				
OKLAHOMA	O-2	X (all statuses)			X (in-house)	X
OREGON	O-3				X	X
PENNSYLVANIA	P-1	X (some statuses)			X	X
PENNSYLVANIA-Blind	P-2	X (all statuses)				
PUERTO RICO	P-3		X		X (BPA/MCRS)	
RHODE ISLAND	R-1	X (all statuses)			X (ACCR) (SDCRS)	X
SOUTH CAROLINA	S-1	X (all statuses)			X (in-house)	X
SOUTH DAKOTA	S-2		X	X		
TENNESSEE	T-1	X (all statuses)			X (in-house)	
TEXAS	T-2	X (some statuses)			X (informal)	
TEXAS - Blind	T-3	X (all statuses)			X (SDCRS)	X (JWK)
UTAH	U-1		X		X (in-house)	
VERMONT	V-1			X	X (in-house)	
VIRGINIA	V-2	X (some statuses)			X (in-house)	X (elaborate)
WASHINGTON	W-1		X	X		
VIRGINIA	W-2				X (RSA materials)	
WEST VIRGINIA	W-3	X (some statuses)			X (BPA)	X (elaborate)

monitoring program can improve the quality of services currently being provided to clients in the system. This minimizes the "after the fact" nature of problem-solving. However, one of the disadvantages of a monitoring program is that monitoring activities usually occur at the caseworker/supervisor level, and thus a clear picture of the agency as a whole is difficult to develop.

Quality Assurance Standards in Monitoring

The logical place to begin a discussion of quality control procedures in monitoring programs is to review those ideas or concepts that agencies consider important enough to elevate to the level of "standards." These standards represent the ideal toward which the quality control process is moving. Standards can be grouped into broad areas; they can be generated in-house, or can be part of an established quality assurance program in place in more than one agency. Once this determination has been made, standards can be further grouped into those that are process-related and those that are outcome-related.

In the respondent agencies with quality assurance programs primarily concerned with monitoring current activities, most of the standards used for measuring performance were generated in-house (although a few of these are based on federal requirements). By examining the similarities in these in-house standards, the concepts or ideas that agencies consider to be particularly important to their respective operations are readily apparent.

Most of these in-house standards used by monitoring programs are process-related. This type of standard emphasizes proper casework practice, especially in the area of documenting client services. The areas where proper procedure is considered to be particularly important include:

- determining eligibility;
- placing a client into extended evaluation;
- closing a client as ineligible for services;
- completing the IWRP; and
- closing a client as rehabilitated or not rehabilitated.

Timeliness is one key procedural standard that can be applied to each of these program transitions. An interesting observation is that

few of the in-house standards used in the respondent states in monitoring their own programs are outcome-related. Even though these programs emphasize monitoring activities, one would expect at least a few outcome-related standards to ensure that the monitoring standards are ultimately related to program effectiveness. The few monitoring programs that include outcome-related standards as part of their quality assurance program are mostly from the larger agencies. This might mean that smaller agencies simply do not have the resources available to develop and measure performance on outcome-related standards. If resource availability is a problem in the smaller agencies, then perhaps these agencies should consider adopting some of the available outcome-related standards packages to supplement their process-related standards.

Level of Review in Monitoring Activities

A very important aspect of any quality assurance program is the level within the VR agency structure where quality assurance activities apply. In most VR agencies, monitoring activities are held at a relatively low level, usually starting at the counselor/supervisor level. The activities are held at a certain time interval (usually monthly), at status changes, or at critical points in the service process (acceptance, IWRP, closure). In most of these cases, the counselor's performance is reviewed using process-related standards. As monitoring activities are usually conducted at the counselor level, it makes sense for monitoring programs to emphasize process over outcome. Oftentimes, these lower-level monitoring activities move upwards; for example, the counselor is reviewed by his/her supervisor, who is in turn reviewed by his/her superior, and so on.

The basic purpose of a quality assurance program is to identify problems and then correct them. Only rarely did our respondents describe the process by which problems identified through quality assurance activities are corrected. In those cases where a "feedback" process was described, it usually consisted of the reviewer and the reviewee negotiating an "action plan." This "action plan" is followed by a re-examination at a later date.

Case Review Instruments Used in Monitoring

By far the most popular method of implementing quality control in both monitoring and evaluation systems is the case review. Almost without exception, the responding agencies gave an indication that case reviews compose a major part of their quality assurance programs. This is one area in which monitoring and evaluation systems show little difference. What differs among agencies and across the monitoring and evaluation functions is the length of the instrument and its focus.

The majority of state agencies that responded to our information request design their own in-house case review instruments for use in monitoring. These instruments range from just a few items to a complex, detailed case review instrument. But, for the most part, the case review instruments utilized in monitoring seek to ensure that proper casework procedures are being followed. As would be expected, these areas of emphasis in case review correspond to the most frequently mentioned standards for monitoring the quality of services (most of these in-house instruments ask questions answerable by a simple "yes" or "no"). In a few cases, space is left at the end of the instrument for a brief narrative describing the results of the review. As used in a monitoring system, case reviews also provide the basis for counselor performance reviews. As we will see in the following description of VR agencies' evaluation systems, case reviews may also provide information for broader agency-level performance reviews. In a monitoring system, however, case reviews and counselor reviews are part of the same process.

A few agencies reported that they had found packaged case review instruments particularly suited to their monitoring needs. The most frequently mentioned case review instruments were the San Diego State Case Review Schedule (SDCRS) and the Assumption College Case Review. The San Diego instrument allows for review of the client's case record to ensure that all procedures were followed when a client was in any particular status, while the Assumption College Case Review emphasizes proper procedure in advancing a client from one status to another.

QUALITY ASSURANCE THROUGH EVALUATION PRACTICES

Evaluation systems differ from monitoring systems in that evaluation systems do not attempt to alter or improve current practice, but rather assess past performance in the hope of improving future performance. One of the advantages of an evaluation system is that it is more centralized, and results are easily aggregated for the entire agency in a short period of time. A disadvantage is that evaluation systems do not improve services to clients currently in the program; they look instead to improve services in the future.

Quality Assurance Standards in Evaluation Systems

While monitoring systems emphasize process-related standards over outcome-related standards, the evaluation systems described by our state agency respondents usually combined elements of both. In our sample, most evaluation systems used standards developed in-house, which combined process-related and outcome-related performance measures. The process-related standards are similar to those described earlier in monitoring systems. Of the outcome-related standards, most emphasize such things as:

- comparison of the current year's performance to the previous year's;
- retention of benefits;
- client satisfaction;
- client earnings information; and
- job placement (competitive and non-competitive employment).

There are also packaged standards systems currently in use in state agencies' evaluation systems. Among those mentioned by states are the BPA Program Standards and the Georgia Management Control Project Standards. Both of these systems received high marks from their users. The BPA Program Standards concentrate on outcomes and impacts, especially in terms of agency efficiency and client services.¹ The Georgia Management Control

¹Berkeley Planning Associates, Vocational Rehabilitation Program Standards Evaluation System; Using the System: An Analytic Paradigm for Management, June 1982.

Project acts as the opposite of a monitoring system; it seeks to reduce the constant monitoring of counselors by including counselors in the objective planning process and eliminating "superficial controls."¹

In addition to comparing agency performance to previously established standards, many evaluation systems regularly compute and publish descriptive statistics such as the rehabilitation rate, acceptance rate, referral rate, referral backlog, and the ratio of closed to open cases for a specific period.

Level of Review in Evaluation Systems

While most quality assurance activities in monitoring systems take place at lower levels in the VR agency's structure, evaluation activities usually take place at a higher level. In many agencies, a separate staff is maintained with responsibility for evaluation quality assurance.

In those agencies with a separate quality assurance staff, the staff usually conducts a general review not focused on any specific counselor or client; that is, the review operates more as an overall agency evaluation than as a counselor evaluation or a monitoring function. In the evaluation systems described by the state agencies, the reviews are also held less frequently than in monitoring systems (usually quarterly or semi-annually), and cover a larger sample of cases.

An interesting observation is that very few agencies with evaluation systems discussed any quality assurance activities at lower levels such as the counselor/supervisor level. While this does not mean that no quality assurance activities are held at this level, it could point to an area that needs more attention. If an agency expects the quality assurance staff to detect all important problems in service delivery, it might be beneficial for them to re-evaluate the utility of assessing service quality for more disaggregated levels (e.g., by unit or by counselor).

Another observation, which was noted earlier in the description of monitoring systems, is that few agencies described their processes for improving performance that is found to be problematic. This is especially true for evaluation systems. In those few cases where feedback mechanisms

²The Management Control Project: A Description, Georgia Rehabilitation Agency, 1980, p. VII.

were described, they usually consisted of staff meetings, reports, memoranda, and large-scale "action plans." It is possible that the greater "distance" between the reviewer and reviewee at higher levels hinders feedback. (This is especially true if it is the "agency" that is being reviewed.) If this is the case, then agencies may need to concentrate on quickly disseminating review results and adopting and promulgating action plans.

Case Review Instrument

As was noted earlier, there is little difference between monitoring and evaluation systems in terms of how case reviews are conducted. Although they comprise a major part of both systems, case review findings are emphasized less in evaluation systems than in monitoring systems, since they are designed primarily to check compliance with established procedures or procedural standards.

In an evaluation system, case reviews are designed to supplement the use of outcome-related standards. However, agencies maintaining a separate quality assurance staff may have more resources available to invest in case review (in terms of staff time available and staff expertise) and thus may be able to conduct more thorough case reviews.

Performance Assessments

Since in an evaluation system the case review process is part of an overall agency review, some supplementary method of evaluating the performance of individual counselors must be developed. Only a few of the state responses describing their evaluation systems mentioned counselor performance reviews. In these cases, counselor performance was reviewed by means of smaller-scale case reviews, or by means of client satisfaction questionnaires. In a few cases, counselors were previously given the specific standards or goals against which performance would be rated. The standards include such things as comparisons to the previous year's performance, and negotiated goals. For the most part, the performance objectives referred to the following aspects of program functioning:

- referral and intake;
- caseload mix; and
- the proportion of 26 closures and competitive employment outcomes.

SUMMARY

Most quality assurance systems can be grouped according to their relative emphases on monitoring versus evaluation functions. While some state programs have incorporated elements of both types of quality assurance, the program usually favors one over the other. In our sample, 26 agencies had adopted a monitoring approach to quality control, two used evaluation, and 15 had elements of both.

Monitoring systems seek to closely watch current practices with the intent of intervening to change poor practice as soon as possible. The following presents a summary of the observed similarities of the monitoring systems in the different states:

- Monitoring activities take place at a lower level than do evaluation systems, usually at the counselor/supervisor level.
- Monitoring activities also take place more frequently than evaluation efforts (usually monthly).
- Most monitoring standards are process-related.
- Monitoring is conducted by means of case reviews, using in-house assessment instruments.
- Monitoring systems are closely related to assessments of caseworker performance.

Evaluation systems, rather than monitoring current activities, assess past agency performance in order to learn how future performance might be improved. The following is a summary of the observed similarities among the evaluation systems in the different states:

- Evaluation activities usually emphasize agency-wide (or area-wide assessments).
- Evaluation activities take place less frequently than do monitoring activities, usually quarterly or semi-annually.
- Evaluation standards are mostly outcome-related, but can be process-related as well.
- In evaluation activities, case review findings are supplemented by computed statistics, and comparison of program performance to outcome standards and other baseline data.
- Evaluation systems are less well adapted for assessing the performance of individual caseworkers.

The variety of methods used across the different state agencies indicate that "quality" and "quality assurance" mean different things in various state agencies. BPA recommends that states consider an approach that includes both evaluation of agency outcomes as well as concern for compliance with program regulations and other procedural "quality assurance" standards. While it is important that state agencies follow program regulations and specified modes of operation, procedural compliance itself does not guarantee service quality. In fact, we would suggest that if the agency's performance goals as measured by clients' ability to obtain and keep jobs in competitive or other suitable employment are not met, then other measures of quality may be meaningless. This dual approach is reflected in the system of RSA performance measures, refined by Berkeley Planning Associates, which address concerns about procedural quality as well as performance outcomes.¹

Many agencies that submitted data for our review indicated that the San Diego Case Review, or another case review instrument, adequately served their compliance assurance needs. So long as the state-federal program is based on federal regulations, this procedure at least ensures examination of federal regulatory requirements. However, the relationships of these procedural standards to program outcomes has not yet been fully explored. We recommend rigorous investigation of these relationships before standards based on regulatory procedures are adopted as part of the quality assurance system for the national program.

¹For an overview of the standards evaluation system, see Berkeley Planning Associates, Vocational Rehabilitation Program Standards Evaluation System: Executive Summary, June 1982.

11. TIMELINESS AS A QUALITY ASSURANCE CONCERN

In Berkeley Planning Associates' pretest and refinement of the Vocational Rehabilitation Program Evaluation Standards,¹ an investigation of the appropriateness of including performance standards for case timeliness was carried out. In addition to the quality assurance material collected from 51 different state agencies, BPA developed information on case timeliness for a sample of clients in four Model Evaluation Unit pretest states.² The review in the following pages summarizes our findings and results in recommendations for the inclusion of timeliness as a procedural standard in the Standards Evaluation System.

The "Timeliness" Procedural Standard (#11) included in the Standards Evaluation System as refined by Berkeley Planning Associates seeks to avoid delays in the VR process that are likely to impede or hinder successful rehabilitation of the client. Rather than set a performance standard using time-in-status to define "undue delay," this Procedural Standard requires that each state have a monitoring or flagging mechanism for cases remaining in statuses over a given length of time, and a procedure to evaluate the appropriateness of any case delay. Many of the state VR agencies already have variations of such a system in place.

This standard pertains to the RSA goal of providing quality case services, for two reasons. First, one aspect of the quality of a client's service experience is the speed with which his or her case is handled: did the client feel that the counselor "cared" about him (as evidenced by the fact that the counselor "kept on top of things" and "kept things moving along"), or did the counselor seem to put him on a lower priority? The client's perception of his treatment by VR can have an impact on his

¹ Described in Vocational Rehabilitation Program Standards Evaluation System: Final Report, "Executive Summary," June 1982.

² Because of the small size and nonrandom nature of the MEU samples, the findings on timeliness in the four state agencies must be considered preliminary, at best. Nevertheless, the findings do suggest how case flagging systems might be improved.

attitude toward VR and about the usefulness of participation in VR. Second, research on successful rehabilitation outcomes has suggested a relationship between timeliness and success (perhaps as a consequence of the perceptions discussed above).

The issue of timely case movement or "undue delays" (as it is phrased in the current standards) has been one of long discussion and controversy. While there is literature to support the correspondence between certain times in process (particularly time to eligibility decision) and outcome, there have also been questions about interrater reliability in the area of judging timeliness of case movement through case review. Nevertheless, an overall review of timely case movement on a client-by-client basis is best handled through case review, if items can be identified that have good interrater reliability.

The issue of timely case movement has generated much discussion, analysis, and controversy. Among the issues raised are such questions as the following:

- Is there evidence that clients actually experience undue delays during the VR process?
- Do such delays actually impede or hinder successful outcomes?
- Can we measure timeliness? Conversely, can we reliably identify occurrences of undue delay?

In answer to the first question, it appears that some clients do experience what appear to be undue delays. For example, previous reports of HEW Audits (1967-1974) indicated that clients were left in statuses often for excessive lengths of time, ranging up to over four years in some cases.¹ Reasons cited for such delays included: (1) lack of a monitoring system alerting counselors to abnormal lengths of time in status; (2) lack of contact between counselor and clients; and (3) difficulties in establishing job objectives for the client. Other observers have noted that many apparent delays in service are, in fact, due to a failure to "move paper" on clients who are inappropriate for VR or unlikely to have successful outcomes, or to more widespread delays in clerical action by caseworkers who are "behind in their paperwork." The opinion

¹HEW Audit Agency, Reports on the Administration of the Vocational Rehabilitation Program, 1967-1974.

was consistently expressed in the Audit reports that undue delays are detrimental to a client's potential for rehabilitation and that standards should be established for monitoring and following up on cases remaining in critical statuses too long. It should be noted that "too long" in a status is not specifically defined in the Audit reports, although some of the reports stated that six months is generally regarded as excessive for most statuses.

Other researchers have also documented the existence of what appear to be excessive times in certain statuses. For example, the Region I and Region VI contributions to the "New Orleans Report" found that average times in certain statuses varied widely across state agencies¹ (e.g., large vs. small, general vs. specialized), and as a function of counselors' caseload types.² With respect to clients with differing disabilities of differing severity, the expectation of what is an appropriate time in status may differ. After adjusting the expectation to fit clients' particular characteristics, flagged cases that exceed the expected time in status can be reviewed to determine whether lack of movement represents "undue delay" for each particular case. In terms of individual clients, Region VI found longer times in status for the severely disabled and for males. A study by the Massachusetts Rehabilitation Commission found that there were some differences in the rate at which clients with different disabilities moved out of statuses 00-02 and 10, although no consistent pattern was noted.³ Other variables examined in relation to time in status were demographic, community, and caseload variables. None of these studies, however, assessed whether such cases represented undue delay.

The evidence is somewhat mixed as to the impact of undue delays on service outcomes. For example, there is some agreement in the literature

¹Region VI (Cooper, P. and Greenwood, R.), "Assessing Undue Delays in the Vocational Rehabilitation Process," Studies on the Evaluation of State Vocational Rehabilitation Agency Programs: A Final Report, Stanford E. Rubin (ed.), Arkansas Rehabilitation Research and Training Center, 1975

²Region I, "The Relationship of Rehabilitation Counselor Caseload Size and Service Adequacy, Service Timeliness, and Caseload Balance," op. cit.

³Massachusetts Rehabilitation Commission (Johnson, B.D.), Analysis of Case Movement of Clients Between Application and Plan Development, 1974.

that favorable outcomes are facilitated by shortening time between referral/evaluation (00-02) status and acceptance or initiation of services (status 10). A West Virginia R & T study revealed that the shorter the time spent in referral/evaluation statuses, the greater the chances of successful rehabilitation.¹ The Massachusetts Rehabilitation Commission study showed that faster movement out of 00-02 is related to greater chance of acceptance for services (status 10) and that faster movement out of status 10 indicates more likelihood of successful rehabilitation.² However, a study by the Arkansas R & T Center found no consistent relationship between total time in status and outcome.³ Urban Institute data show a statistically significant difference in times spent in referral-applicant status for cases closed 26, 28, and 30, although the direction of the relationships is not consistent.⁴ Finally, a 1978 study by Berkeley Planning Associates found no statistically significant effects, on a variety of outcome measures, stemming either from elapsed time in the referral-acceptance phase (status 00-10), or from time elapsed between referral and closure.⁵

Although the research to date does not demonstrate that successful VR outcomes depend on the timeliness, nevertheless, timeliness has been retained as an important measure of the quality of the service process. The importance attached to timely case movement is reflected by Standard 3 of the 1973 RSA Evaluation Standards, which is intended "to ensure that undue delays are avoided in providing clients with VR services." The standard sets upper limits on the length of time spent by clients in particular phases of the VR process (i.e., 8 months for timely eligibility

¹West Virginia Research and Training Center, "Looking at Referral-Applicant Statuses," Rehabilitation Tomorrow, Vol. 4, No. 3, March 1974.

²Massachusetts Rehabilitation Commission, op. cit.

³Cooper, P.G., Client-Counselor Contact, Undue Delay and Closure Status, Arkansas Rehabilitation Research and Training Center, 1975.

⁴Urban Institute, Final Report on Refinement and Expansion of the General Standards for the Evaluation of the Performance on the Vocational Rehabilitation Program, 1976.

⁵Berkeley Planning Associates, Implementing the Rehabilitation Act of 1973: The VR Program Response, February 1978.

decisions and 22 months for timely completion of the VR process). By extension, clients who exceed these upper limits are presumed to be experiencing an "untimely" VR process.

Given the policy importance attached to timely case movement, the question becomes "How can we measure timeliness?" Much effort has gone into attempts to define, and establish standards for, timeliness of case service progress. As noted, research on successful rehabilitation outcomes has supported the concern for timeliness. Previous attempts to monitor the timeliness of service provision by way of a standard on "undue delay" have been hampered, however, by validity and reliability problems. "Undue delay" and its converse, "expeditious" or "quick and efficient" case management, mean different things to different people. The 1973 Standards approach, which sets normative time periods to define "timely" case movement, has been widely and justifiably criticized for its lack of sensitivity to the legitimate differences in individual cases: a complex case, perhaps involving long-term educational services, might well require more than 22 months without any delay. Where a case has been subject to a delay, the situation is further complicated by the differing implications of different causes for delay: lack of client responsiveness, inattention or inefficiency on the part of the counselor or the VR agency, and problems outside of VR (failure of a vendor to deliver, unavoidable waiting lists in training programs). Each imply very different responsibility for time lapses and cannot equally be attributed to VR agency failure.

Thus, use of objective or quantitative measures of timeliness has suffered from arbitrariness and frequent inappropriateness of established time cut-offs for many clients. Other approaches to objective measurement -- such as recording planned initiation and completion dates for each service, and monitoring compliance with the schedule -- are cumbersome in execution. However, subjective or qualitative judgments of timeliness also have been vulnerable to criticisms. BPA believes, however, the major problem, unreliability in application, may well arise due to the incorporation of two distinct concepts into raters' "undue delay" judgments. The term, "undue delay," includes concepts of both time lapse and judgment of blame,

culpability, or unjustifiable time lapse. (The word "delay" itself sometimes connotes willfulness or negligence, and the modifier "undue" definitely implies such problems.) Case reviewers might well differ in judgments as to the cause of a delay, and thus whether VR should be held accountable. For this reason, reviewers may differ in their classification of a case, one citing an undue delay, another seeing an unfortunate time lapse, but being unwilling to label it an undue delay if client motivation or outside vendors played a role.

Because of the problems associated with measuring timeliness, designing procedures to prevent undue delays becomes a complex administrative issue. On the one hand, states could "cast a wide net" to identify and address delays by lowering the standard for flagging and reviewing cases that have been in a particular status more than the "normative" (i.e., timely) period. However, such an approach would also increase the number of reviews and, thus, the total cost of case review activities. In the interest of efficiency, it is important to limit the number of cases flagged as being in status suspiciously long. However, by using the opposite approach (i.e., allowing particularly long amounts of time to pass before flagging cases), we maximize the potential for excessive delays to continue without corrective action. What is needed is a system in which cases are flagged after some "normal" period of time has elapsed. However, as illustrated by the above discussion, the term "normal" takes on different meanings, vis-a-vis time in process in different agencies, for different client groups, and for different service packages. Thus, an agency's case flagging system would ideally set the time cut-off points differentially for different statuses and for different kinds of clients. In this way, agencies would be able to arrive at a balance between the length of time allowed before flagging and the number of cases flagged for review. Also, this would provide the state with a functional tool for monitoring case movement while the client stands to benefit by the attention to his or her progress. The timeliness standards will not be periods of time that are required for every client. Nor will the flagging of a case mean that the case is necessarily mismanaged. Rather, the time periods should indicate the best available times to review the continued appropriateness and efficiency of the client's rehabilitation process.

In the remainder of this report, we discuss two topics related to service timeliness and case flagging. First, we present a "state-of-the-art" review of case flagging systems currently used by state agencies. Next, we present our analysis of the Model Evaluation Units' standards pretest data, obtained from the Timeliness Assessment Instrument, shown in Figure 2. This instrument attempts to overcome the measurement problems discussed earlier, by dividing case assessments to timeliness into two segments: first, a notation of whether undue delay has occurred in terms of a time lapse between successive phases in the case history; and, second, an assessment of the reasons for the lapses. The relevant questions concern critical phases of case progress: (1) eligibility determination; (2) development of a service plan; (3) service delivery; and (4) termination. Our intent was to identify factors (i.e., client characteristics and service aspects) that might be used to distinguish among clients when establishing flagging points, so as to improve the usefulness of a state's flagging system. At the conclusion, we present BPA's recommendation for a procedure that states may adopt, in conjunction with their own timeliness practices, to reduce undue delay.

Figure 2
Information Items Obtained by the Timeliness
Assessment Instrument for Reviewed Cases^a

1. Was the case handled in a timely manner (i.e., without undue speed or undue delay)?
2. If undue speed:
 - a. Reasons for judging the case as moving too fast.
3. If undue delay:
 - a. Were the reasons for delay documented in the clients' case record?
 - b. Reasons for delay.

III. REVIEW OF STATE VR AGENCY PROCEDURES USED TO IDENTIFY UNDUE DELAYS

Many state VR agencies have taken the initiative in developing systems for monitoring case progress. In this section we first discuss the range of timeliness monitoring methods used in the 48 state agencies that provided descriptive information to Berkeley Planning Associates. Next, we provide a more detailed discussion of the subset of systems that do include case flagging components.

TYPES OF SYSTEMS USED TO ENCOURAGE TIMELY CASE SERVICE

We identified three broad types of systems used in our responding agencies for assuring timely case movement. First is the group of agencies that provide some form of monthly client list with flags for delayed cases. Twenty-six of the forty-eight agencies have such systems, which are constructed in various ways. For example, 13 of the responding agencies have established flagging times for almost every status (i.e., 00 through 24). In these agencies, the "acceptable" times established for a given status vary over a wide range from status to status and from state to state. The remaining 13 agencies flag only particular statuses; usually, the "non-service" statuses such as 00-02, 06, 10-12, and 20-24. The designation of "acceptable" times varies widely for this group as well.

The second type of system used for timeliness assurance is that which provides monthly client lists without flags; this system is used in 14 of the 48 responding agencies. Agencies using this system usually provide counselors and counselor supervisors with computer read-outs listing all active cases (i.e., cases in 00-06, and in 10-24). No time limits are established. Instead, these agencies rely on counselors and supervisors to monitor case progress, identify seemingly excessive times in status, and initiate case review and corrective action. This type of system may satisfy the monitoring needs of very small agencies, which may be able to adequately monitor each case's progress simply by scanning the total

client list. In contrast, agencies with large caseloads may have a greater need for a mechanism (e.g., a case flag) to highlight the cases making slow progress.

Finally, eight of our responding agencies described systems that rely on individual case reviews. While such agencies may provide monthly client lists, they tend to rely on reviews of individual case files in order to identify undue delays. In some cases, case file reviews are conducted only as required by law (e.g., 90-day review during extended evaluation, annual reviews of the IWRP). In a few cases, additional reviews may occur, as in agencies that use random sampling for case reviews as part of the agencies' overall quality assurance mechanisms.

Each of the three systems described above have one common trait: they all provide some mechanism for intervening on behalf of a client while he or she is still on the case roll. In addition, we would like to make note of a system that is currently undergoing initial experimentation, and that uses a different approach to encourage timely case movement. This is the proposed weighted case closure methodology developed by the Virginia Department of Rehabilitation Services. In that agency's efforts to assure quality case handling, it is currently experimenting with a weighted case closure formula that incorporates a time factor into the calculation.¹ Without going into the details of the weighting formula, it is sufficient to note that the time component focuses on the time spent in particular statuses perceived as potentially problematic by the agency: status 02 (application); status 10 (plan development); status 20 (ready for employment); and status 24 (service interrupted). Using a statistical norm approach (i.e., deviation from average time elapsed) the methodology then assigns "points" to the case for overall weighting. Such a weighting system could be adapted as desired by individual agencies to reflect their particular priorities regarding statuses of interest. (For example, agencies could incorporate such time components as total time elapsed during eligibility determination (status 00-02/06), combined time in status 10 and 12, time spent in training (status 18), total time in service (status 19-24).

¹This system description was obtained from a presentation by the Virginia Model Evaluation Unit, at the VR Evaluation Conference in Scottsdale, Arizona, in July 1981.

and so forth.) The point is that this system is intended to operate as an incentive mechanism in the overall evaluation of worker performance, rather than a monitoring/intervention mechanism on a case-specific level as is true for case flagging systems. Some questions remain about the usefulness of case weighting systems for encouraging timeliness. First, as implied above, weighting systems will not assist agencies' intervention on current clients' behalf, since the weighting is done after closure. Thus, we would need assurance that the inclusion of a factor for timeliness in the formula actually served as an incentive to workers to improve timeliness. Second, we would need some evidence that the timeliness factor exerted a sufficient influence on counselors' behavior to overcome or at least balance the effects of other components in the weighting formula. For example, the Virginia system incorporates concerns for service to priority groups (i.e., the severely disabled), for quality outcomes (measured by closure wage), and for reduced service costs. The first two of these concerns could possibly serve to increase the time-in-service averages. To the extent that counselors trade off timeliness for quality outcomes and/or service to the severely disabled, concern for timeliness is reduced. Finally, the weighting system is currently applied only to 26 closures, although the agency sees the potential for extending it to 28s. Until this is possible, weighting systems will fail to address one of the key issues that motivated the development of case flagging systems: to avoid delays for those who may never achieve a successful outcome, as well as to reduce the total time in program for 26 closures.

We do not propose that RSA or states adopt a case weighting system as a substitute for a case monitoring system, given the problems discussed above. However, if after Virginia's experiment, it appears that the time factor does influence counselor behavior, then consideration might be given to use of a weighting system as a complement to the state's monitoring system.

In summary, about half (26) of our responding agencies use some sort of case flagging system. Fourteen of the agencies provide monthly client lists without flags, which are visually scanned to detect excessive times-in-status. Eight agencies rely on other methods -- primarily case review -- to detect occurrences of undue delays. The Appendix contains examples of

48 state systems. Below we present a more detailed discussion of the case flagging systems in use in state agencies.

EXISTING CASE FLAGGING SYSTEMS

The internal structures of case flagging systems vary considerably across state agencies. The dimensions over which these systems differ include:

- the decision-rule used to trigger a case flag;
- the points (i.e., statuses) in the service process to which flags are applied;
- the amount of time-in-status that triggers the case flag; and
- the type and amount of information provided by the flagging system.

Before discussing these issues, a few general comments can be made. First, we found no evidence to suggest that flagging times were adjusted by states in response to variations in client type. Thus, agencies did not establish longer flagging times for severely or multiply disabled clients, nor did they distinguish among different types of disabilities when setting flagging times. Although this is somewhat surprising given the intuitive appeal of differential flagging times for different client types, it may be due to the need for a more sophisticated computer program to make the adjustments.

Second, in the 26 agencies with case flagging systems, all but one request monthly lists of clients in-process; the other agency requests this information on a quarterly basis. These lists provide either a full accounting for all in-service cases (a "master list") with the delayed cases being highlighted, or only provide a list of those delayed (as appropriate to the agency's flagging time). In most agencies the procedure follows a "top down" process; that is, the central or district office provides the list to the counselors and supervisors. However, in a few cases we found a "bottom up" approach, wherein the counselors would produce reports on their clients, for the information purposes of the agency's management personnel.

As would be expected, all of the case flagging systems are based on time measurements within particular statuses. However, the decision rules used to flag cases vary across agencies. The following variety of decision rules were found across our sample of responding agencies:

- Flagging occurs after a case has remained in a particular status past the established maximum time. In such cases, review must occur and, barring extenuating circumstances, counselors must move the case on to the next appropriate status (including closure).
- Flagging occurs after some "desirable" period of time-in-status, rather than after an established maximum time is exceeded. In such cases, the flag serves an "advisory" function, rather than serving to note cases where action is mandatory.
- Flagging occurs because no counselor-client contact has occurred within some established period of time. This time-period varies as appropriate to the client's current status; for example, longer time periods are allowed between contacts for clients in training (status 18) than for clients in plan development (status 10).
- Flagging occurs based on need for review. For example, if a state reviews all cases in status 02 after 90 days, then flags will point out those cases that either are approaching or have recently passed the 90-day period. Delay problems, if any, will be discovered during review.

The next dimensions on which different states' flagging systems vary pertain to the statuses for which flagging times have been established, and the exact time norms established for those statuses. Table 1 summarizes the existing flagging systems. The table shows the apparent special scrutiny given to "non-service" statuses in the flagging process. Whereas the three core service statuses (14, 16, and 18) are flagged by 11 to 15 of the agencies, the other statuses are each flagged by a minimum of 19 agencies.

As would be expected, more time is allowed to elapse in the core service statuses, in relation to the other statuses, before flagging occurs.

Table 1
Summary of Case Flagging Parameters: Statuses
Flagged and Summary Statistics for Statuses

Status	N*	Average of Responses (Months)	Range of Responses (Months)	Modal Response (Months)
00	22	3.2	2-6	3
02	24	4.6	2-6	6
06	20	15.4	2-19	18
10	24	4.6	2-10	6
12	21	4.3	2-12	3
14	15	13.3	4-48	12
16	14	13.4	4-48	12
18	11	39.1	1-99	48
20	19	4.2	2-9	3
22	22	3.8	2-6.5	3
24	20	5.7	2-12	6

*Number of agencies which have established flagging times
for the particular status

Thus, for core service statuses, the average time lapse prior to flagging ranges from 13.3 months (status 14) to 39.1 months (status 18). In contrast, with the exception of extended evaluation (in which extensive services can be provided), the remaining statuses all have average flagging times falling within the range of three to six months. However, within any given status, agencies vary widely in the particular flagging times used. The narrowest range occurs for the initial eligibility determination statuses: flagging times for both status 00 and 02 ranged from a minimum of two months to a maximum of six months. In contrast, the planning statuses (10 and 12) showed a much wider range of flagging times (from two to ten months) as did two of the "post-service" statuses (statuses 2C and 24). Interestingly enough, the flagging times for status 22 (in employment) tend to be set at a higher level than one would expect. That is, the law specifies that clients shall be in employment for at least 60 days prior to closure into status 26. One would expect agencies to flag cases after that minimum time had elapsed -- approximately two months -- in order to enhance their 26-closure rate. However, only three of the 26 agencies flag at two months. Finally, the widest range of flagging time was found for the core service statuses: the range was from four months to four years for statuses 14 and 16, and from one month to over eight years for status 18 (training).

The last dimension over which flagging systems vary is that of the information provided by the systems. The basic information is, of course, the amount of time elapsed since the last "milestone" (i.e., status change or client-counselor contact). For the majority of our responding agencies, this is the only information provided for monitoring timeliness. However, a few agencies do provide supplemental information for use by counselors and supervisors. For example, some agencies use a multi-level flagging system; cases in status 02 get one star at 90 days, two stars at 120 days, and three at 150 days. Usually, these levels denote the following: the first level indicates "best practice," in the sense that that time period is associated with successful outcomes. Thus, this may be the average time-in-status experience by 26s, or the period within which 75% (or 90%, etc.) of their 26 closures passed through the particular status. The second level denotes the maximum "desirable" time by which the case should

move to a new status. If this time is exceeded, cases should undergo review. Finally, the third level denotes the time by which (barring unusual circumstances) some movement must occur for the case.

A second type of system found in our survey provides special summary reports for particular groups. For example, one state provides counselors with reports on "referral and applicant backlogs" and on "unusually active or inactive clients," in addition to the basic client flow report.

Finally, some agencies have incorporated the timeliness concept into their goal setting and performance assessment systems. For example, some agencies have set policies regarding the maximum acceptable number or proportion of clients flagged; e.g., "less than 10% of our O2s will have flags at any one time." This concept has been extended even further in a few agencies, to incorporate a measure of progress over time. Thus, such agencies set goals for a certain percentage reduction over time in the number of cases flagged, and/or in the average time-in-status experienced by clients.

This concludes our review of existing state agency case flagging systems. We turn next to a presentation of the findings of our analysis of the standards pretest data.

IV. ANALYSIS OF SAMPLE TIMELINESS DATA
FROM FOUR STATES

Reviewers from the staff of each of the Model Evaluation Units in four states -- Delaware, Michigan, Oregon, and Mississippi -- assessed the timeliness of movement through the VR process for a sample of closed cases. Separate assessments were made for the referral and acceptance stage (statuses 00-08/10), for the plan development stage (statuses 10-12), and for the service process (statuses 12-26/28/30). These assessments were judgmental, in the sense that no specific quantitative standards (i.e., times-in-status) were applied to determine timeliness. Rather, the assessments were based on judgments regarding the appropriateness of the speed of case movement, given the various circumstances impacting a particular client's caseflow. Reviewers needed to be thoroughly familiar with the case circumstances before attempting to assess timeliness. Familiarity with each case was gained by completing the CRS, the R-300 Verification instrument, or by conducting an independent review of the case file.

All of the reviewers were state agency staff trained in conducting the timeliness assessment. Training for the timeliness assessments took place in each state either as an adjunct to the Case Review procedure (Oregon and Pennsylvania), to the R-300 Verification procedure (Delaware, Mississippi, and Virginia), or as an independent activity (Michigan).

Interrater reliability was analyzed for each state by SDSU. The consistency ratios for the timeliness assessment are presented in Table 2. A consistency ratio of .75 was considered to be adequate reliability. Pennsylvania, Virginia, and Mississippi have very high consistency ratios (all above .80) on all three timeliness assessments. Michigan and Oregon each have some very high consistency ratios and one that is just adequate. The lack of high consistency ratios across all states is indicative of the judgmental nature of the timeliness assessments. It is clear that in some cases, reviewers did not agree on what constitute timely case handling. In order for the validity and reliability of these measures to be improved,

Table 2
Consistency Ratios for Timeliness Assessments

	DE	MI	MS	OR	PA	VA
Consistency Ratio for Acceptance (00-08/10)	.50	.96	.98	.87	.81	.95
Consistency Ratio for Plan Development (10-12)	.75	.75	.93	.92	.82	1.00
Consistency Ratio for Service Provision to Closure (12-26/28/30)	.50	.79	.86	.70	.83	.88

reviewers will need additional training, and the establishment of criteria for determining timeliness. Even with some measurement problems, an analysis of these data can still provide RSA with useful ideas and information on what factors need to be examined in deciding how timely case movement can be ensured.

In the rest of this section, we present our findings from analysis of data from clients in Delaware, Michigan, Oregon, and Mississippi for whom outcome data is available in the pretest.¹ The analysis includes an examination of the timeliness assessments and how they relate to outcomes, time-in-process, client characteristics, and process characteristics.

DESCRIPTION OF TIMELINESS

Timeliness of Acceptance

Timeliness assessments for the acceptance phase, 00-08/10, are presented in Table 3. The reasons why cases were rated as untimely are also presented in this table. Overall, 78% of the cases were rated as timely, indicating that most cases go through this phase without undue delay.²

The assessment of timeliness does vary greatly by state. Delaware rated only 5% of its cases as timely, whereas all (100%) of Oregon's cases were considered timely. The reasons why there is such a large difference among states is unclear. It is very possible that cases in Oregon and Mississippi do not experience as much undue delay as cases in Delaware and Michigan. On the other hand, the differences between states may be reflective of different criteria used to assess timeliness. The timeliness assessments for each state were made by reviewers from that state. And, although interrater reliability within a state was examined, state timeliness assessments do not examine the differential judgments of timeliness across states. An examination of rater by rater variations in timeliness judgments could be performed by modeling the relationship between the

¹In Pennsylvania and Virginia, the timeliness data were not collected on clients with comparable outcome data.

²The pretest sample, however, only includes 26s and 28s. The timeliness of 08s was not assessed. Whether or not 08s experience the same level of timeliness is unknown.

Table 3
Assessment of Timeliness
for Acceptance (Status 00-08/10)

	Delaware	Michigan	Oregon	Missis- sippi	Total
% Rated as Timely (N)	57% (49)	72% (95)	100% (34)	89% (83)	78% (261)
Reasons for Being Rated Untimely:					
No response by client	10%	11%	--	0%	9%
Client indecision	10%	4%	--	44%	13%
Client unavailability	15%	4%	--	0	7%
No contact by counselor	15%	22%	--	22%	20%
No action by counselor	35%	48%	--	33%	41%
No counselor assigned	5%	0	--	0	2%
Administrative delays	40%	0	--	0	14%
Lack of resources	0	0	--	11%	2%
Delay in receiving reports	10%	26%	--	22%	20%
Interagency delays	30%	0	--	0	11%
Lack of placement opportunities	0	0	--	0	0
Other	30%	22%	--	0	21%
(N)	(20)	(27)	--	(9)	(56)

judgment itself, the time facts (days in status), and the demographic facts of particular cases. To determine if different criteria were used in making assessments across states, either an across-state reliability check should be done, or a single team of reviewers should assess the cases in all states.

The most common reason for delay was "no action by counselor." This reason was cited for 41% of the untimely cases. "No contact by counselor" (20%), "delay in receiving reports"(20%), and "other" (21%) were the next most common reasons for delay. Every state cites "no action by counselor" as a common reason for delay during the acceptance phase. Otherwise, the states varied quite a bit. In Delaware, "administrative delays" was the most often mentioned cause of delay. This reason, however, was not mentioned in either Mississippi or Michigan. "Client indecision" was the most common reason in Mississippi, but was rarely mentioned in the other two states. These differences may reflect the differences in state practices and experiences. They may also be reflective of differences in how the states completed the assessment forms.

Timeliness of Plan Development

Only 11% of all cases were rated as not timely for the plan development phase (see Table 4). Hence, undue delay during this phase does not appear to be a problem. Although all states reported a high percentage of cases as timely, there is a difference between states. Delaware rated the fewest percentage as timely while Oregon and Mississippi rated the most as timely.

"No contact by counselor" and "no action by counselor" were the most common reasons for delay. They were each frequently mentioned by both Delaware and Michigan. "No response by client" was also a common reason for delay in Michigan. Conclusions from these findings, however, cannot really be made given that so few cases (26) were untimely.

Timeliness of Service Provision

Of the three assessments of timeliness, service provision has the lowest rating. Sixty-four percent of the cases were considered timely

Table 4
Assessment of Timeliness
for Plan Development (Status 10-12)

	Delaware	Michigan	Oregon*	Missis- sippi	Total
% Rated as Timely (N)	77% (49)	84% (95)	94% (34)	100% (83)	89% (261)
Reasons for Being Rated Untimely:					
No response by client	18%	38%	--	--	27%
Client indecision	9%	7%	--	--	8%
Client unavailability	9%	15%	--	--	19%
No contact by counselor	45%	54%	--	--	46%
No action by counselor	36%	31%	--	--	31%
No counselor assigned	0	15%	--	--	8%
Administrative delays	0	7%	--	--	4%
Lack of resources	0	15%	--	--	8%
Delay in receiving reports	9%	15%	--	--	12%
Interagency delays	0	7%	--	--	4%
Lack of placement opportunities	0	0	--	--	0
Other	9%	15%	--	--	15%
(N)	(11)	(13)	--	--	(26)

*Since only two cases were untimely in Oregon, their reasons for untimeliness were deleted from this table. They are included in the overall reasons for being untimely.

(see Table 5). The variation between states is striking. Delaware rated 37% as timely, while Mississippi rated 84% as timely. The difference between states in the timeliness of service provision is the same as with the acceptance and plan delivery phases. Delaware was the lowest, while Oregon and Mississippi were the highest. Again, whether this is due to actual differences in case handling or to different rating criteria is not known.

"Client unavailability" and "no contact by counselor" were the major reasons cited for cases being untimely. "No response by client" and "no action by counselor" were also frequently mentioned. The reasons for delay also varied by state. For example, "client indecision" was often cited in Oregon and Mississippi, but rarely in Delaware and Michigan.

In summary, although the states differ in the specific reasons cited, delays caused by both clients and counselors were common in all states. Client-oriented reasons (e.g., indecision, unavailability) were frequently mentioned as reasons for delay during service provision. These reasons were much less common for the acceptance and plan development phases. Counselor-oriented reasons for delay (e.g., no contact, no action) were frequently cited for each of the three phases and in all of the states. This suggests that some type of case flagging mechanism that would alert counselors of undue delay could be very useful. Surprisingly, programmatic reasons (e.g., administrative, lack of resources) were rarely seen as causing delays. Only during the acceptance phase were these reasons common.

Our data show a strong association between outcome and the subjective assessments of timeliness. Table 6 shows the relationship between closure status and assessed timeliness at the acceptance, plan development, and service provision phases. Seventy percent of the clients rated timely at acceptance were closed 26, while only 53% of those who were untimely were closed 26. The relationship is less strong at the plan development phase, with 68% of those assessed timely being closed 26 as compared to 54% of those not timely. Timeliness during service provision is very strongly related to outcome. Eighty percent of those rated as timely during this phase were closed 26, while only 43% of those not timely were closed 26.

Table 5
Assessment of Timeliness
for Service Provision (Status 12-26/28/30)

	Delaware	Michigan	Oregon	Missis- sippi	Total
% Rated as Timely (N)	37% (48)	57% (90)	71% (34)	84% (83)	64% (255)
Reasons for Being Rated Untimely:					
No response by client	23%	37%	40%	8%	29%
Client indecision	10%	13%	40%	38%	19%
Client unavailability	23%	40%	70%	31%	36%
No contact by counselor	30%	47%	20%	23%	35%
No action by counselor	23%	34%	10%	15%	25%
No counselor assigned	7%	24%	0	0	12%
Administrative delays	20%	8%	0	15%	12%
Lack of resources	7%	3%	0	0	3%
Delay in receiving reports	3%	5%	0	8%	4%
Interagency delays	0	3%	0	0	1%
Lack of placement opportunities	0	5%	0	0	2%
Other	37%	11%	0	31%	21%
(N)	(30)	(38)	(10)	(13)	(91)

Table 6
Relationship between Timeliness Assessments
and Outcome

	Outcome	
	26 Closures	(N)
<u>At Acceptance (00-08/10)</u>		
Timely	70%	(204)
Not Timely	53%	(57)
Chi Squared Significance	.02	
<u>At Plan Development (10-12)</u>		
Timely	68%	(233)
Not Timely	54%	(28)
Chi Squared Significance	.19	
<u>At Service Provision (12-26/28/30)</u>		
Timely	80%	(163)
Not Timely	43%	(92)
Chi Squared Significance	.00	

Although these findings show a strong correlation between timeliness and outcomes, the correlation may be artificially high. In rating cases as timely or not, reviewers were aware of the clients' closure status. For some cases, this knowledge most likely had an impact on their assessments. For cases that had clearly experienced or had clearly not experienced undue delay, assessing their timeliness was a straightforward task. But for those cases where it was difficult to assess whether or not an undue delay had occurred, a reviewer may have been influenced by the closure status. For example, a case that experienced some delay but was closed 26 might have been rated as timely, the reasoning being that, although there was some delay, it was not enough to cause a problem for the case in the long run. A similar case that was closed 28, however, might easily have been rated as not timely. Here, the reviewer might have seen the delay as one of the problems in preventing a positive closure. The extent to which closure status influenced the timeliness assessments is unknown. In practice, timeliness assessments would be made prior to case closure.

The observed association between timeliness and positive outcomes does not provide conclusive proof of a direct causal relationship in which timely case handling facilitates positive outcomes. Several alternate explanations are also possible. For example, more severe cases that may take a longer time to be served in each status may also be less likely to have positive outcomes. Alternatively, cases that, for whatever reason, are a poor risk for success may be given less priority by the counselor.

Relationship Between Timeliness and Time in Process

Most previous research has used time in process to measure timeliness of case handling. This approach has been justifiably criticized because of its lack of sensitivity to the legitimate differences in individual cases. As cases remain in the VR process for longer periods of time, they are less likely to be considered timely. However, there are some cases that have gone through the VR system quite rapidly and are still rated as untimely. Likewise, some cases that have been in the system for extended periods of time are considered to be timely. In this analysis, we have used judgmental assessments of timeliness that take into account

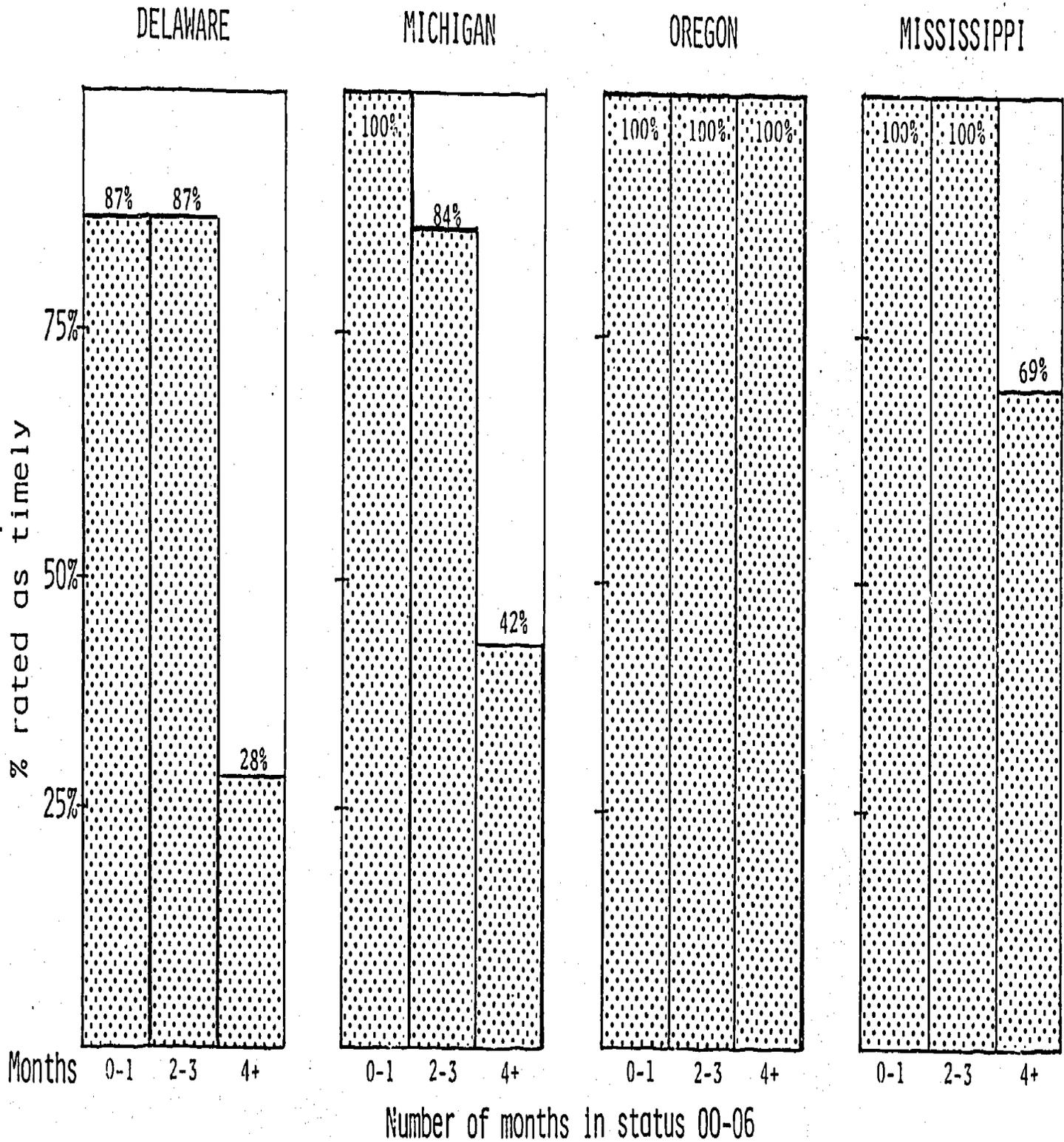
the individual needs of clients. In comparing these assessments with time in process, we find that there is a strong relationship between the two.

Figure 3 illustrates the relationship between the timeliness assessments and time in process for the acceptance phase in each of the states. Except in Oregon, where all of the cases were rated as timely, as the number of months in statuses 00-06 increases, the percent timely decreases. The relationship between timeliness and time in process, however, is different for the different states. In Delaware, a high percentage (87%) of those in the acceptance phase for 0-3 months are rated as timely. There is a sharp drop, however, for those who have been in this phase for four or more months. Only 28% of these clients were rated as timely. All of the clients in Mississippi who remain in statuses 00-06 for zero to three months are rated timely. Although fewer clients (69%) who are in the phase four or more months are considered timely, the drop in Mississippi is not nearly as sharp as that in Oregon. Whereas the patterns found in Oregon and Mississippi are similar, Michigan is quite different. Michigan is the only state that shows a decrease in the percent rated as timely between zero and one month and two to three months. All of Michigan's clients who went through statuses 00-06 in a month or less were considered timely. For those who remained in this phase for two to three months, the percent rated timely dropped to 84%. An even larger decrease occurred for those who remained in this phase for four or more months, with 42% of them being rated as timely.

The relationship between timeliness and time in process during the plan development and service provision phases is presented in Figure 4. Again, there is a strong inverse relationship. As time in process increases, the percent rated as timely decreases. The differences between states for these phases is even more striking than that found in the acceptance phase. In all states, a very high percentage of cases that complete statuses 10-24 in six months or less are rated as timely. In Delaware and Michigan, there is a large drop in the percent timely for those in service for 7-12 months. The percent rated as timely decreased 39% in Delaware and 35% in Michigan between these two time periods. By

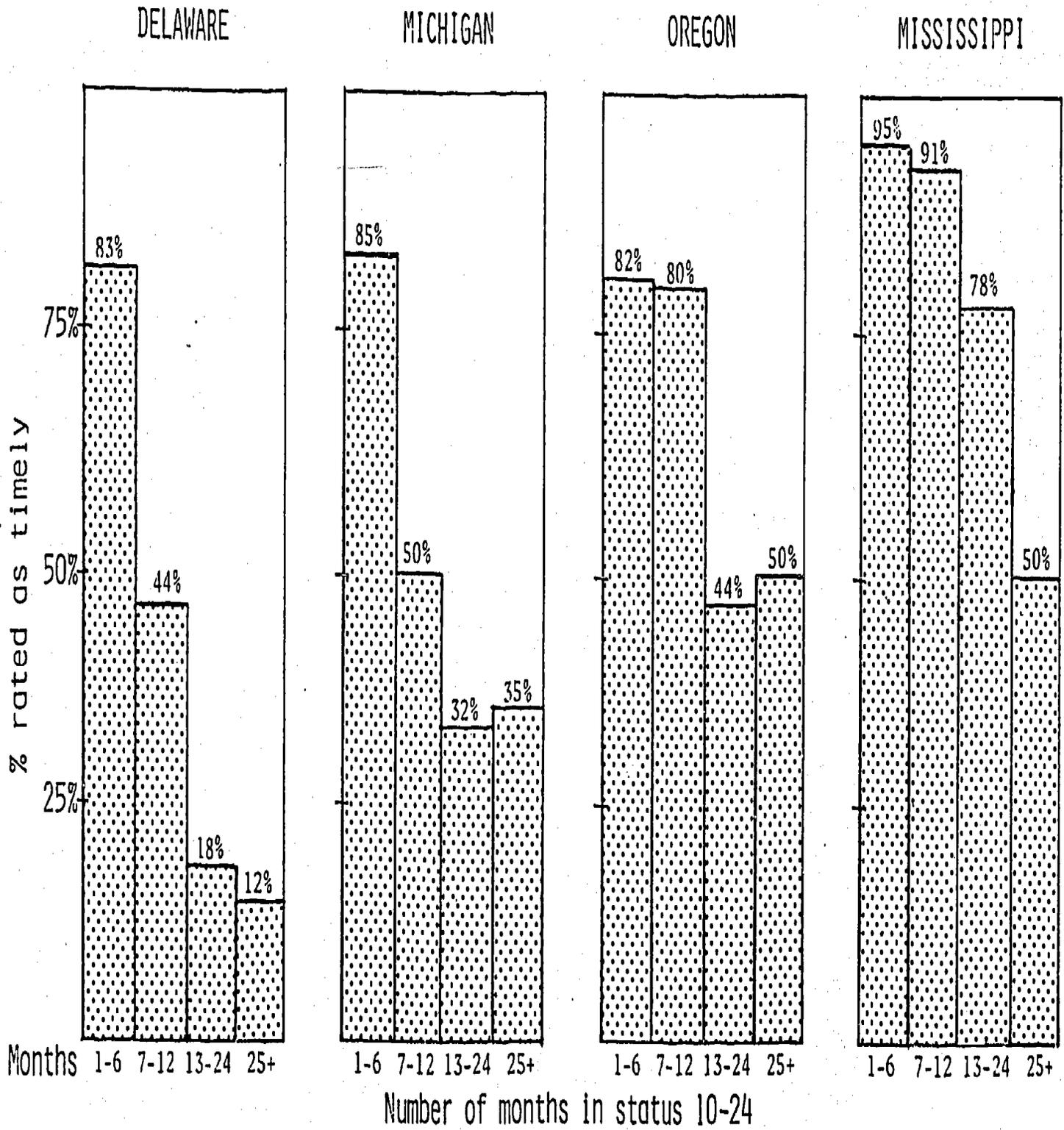
¹Since R-300 data does not provide data for time spent in the plan development and service provision phases separately, the timeliness assessments have been combined. Cases were considered timely only if they were rated as timely for both phases.

Figure 3
 Relationship Between Timeliness Assessments and Time in Process
 by State for the Acceptance Phase



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Figure 4
 Relationship Between Timeliness Assessments
 and Time in Process by State
 for the Plan Development and Service Provision Phases



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contrast, in Oregon and Mississippi, there is virtually no difference between the percent rated as timely in these two periods.

In all four states, a smaller percentage of clients in service for 13-24 months are rated as timely than those in service for 7-12 months. In Delaware and Oregon, the percentage drop is quite striking (26% and 36% respectively), while in Mississippi it is only a moderate drop (13%).

Of the four, Mississippi alone showed a noticeable difference in the percent rated timely in the 13-24 month category as compared to the over-two-year category (78% of the cases in service 13-24 months compared to 50% of the cases in service for over two years). Delaware shows a minimal decrease while Michigan and Oregon show minimal increases in the percentages rated as timely between these two periods.

Looking at the states individually, the following patterns in the relationship between timeliness and time in process for the plan development and service provision phases emerge:

- Delaware: A large drop in the percentage rated as timely at six months and 12 months. Virtually no change at 24 months.
- Michigan: A large drop at six months and a moderate drop at 12 months. Virtually no change at 24 months.
- Oregon: A large drop at 12 months. Virtually no change at six months and at 24 months.
- Mississippi: A moderate drop at 12 months and a large drop at 24 months. Virtually no change at six months.

It is clear that the critical points for determining timeliness during both this phase and the acceptance phase differ by state. Why these differences occur, however, is not obvious. They may be a result of different state practices. A different approach to service delivery could mean that a particular case being served for over six months in Delaware or Michigan would not be timely, while the same case in Oregon or Mississippi would be timely. If different state practices are the reason why states vary, a uniform case flagging system that relied on time in process would not be appropriate. Such a system would not be sensitive to the different state practices and hence would not be useful in eliminating undue delay.

The differences between states in the relationship between timeliness and time in process may also be due to different definitions of timeliness. As stated earlier, the study did not include measurement of interrater reliability across states. Hence, it is not known if states used the same criteria in assessing timeliness. It would not be surprising if reviewers in different states used different time cut-off points when making their assessments of timeliness, and the variations should be identified across all states. Before any standard mechanism for case-flagging is implemented, a better understanding of the reasons for differences in timeliness across states must be obtained. From our findings, it is unclear as to whether the differences between states are real or artificial. If the differences are real, a case-flagging system should be tailored to each state. If the differences are simply an artifact of how the data were collected, then a uniform case-flagging system may be appropriate. However, states may use their own timeliness procedures to implement the approach BPA recommends later in these pages.

FACTORS AFFECTING TIMELINESS

It has been suggested that in order for a case-flagging system to be useful in ensuring timely case handling, it should be sensitive to the needs of individual clients. Many think the ideal case-flagging system would set time cut-off points differently for different statuses, for different client types, and for different service packages. Thus, in our analysis we attempted to isolate specific factors that affect timeliness and that could be included in a case-flagging system.

In trying to explain why cases were or were not considered timely, we have looked at a series of variables representing both client characteristics and the clients' service process experience. Client characteristics include variables such as age, race, sex, education, and previous work experience. A client's specific disability, as well as the severity of the disability, might also show a relationship to timeliness. It may be that clients with certain disabilities are more likely to experience undue delay. Further, severely disabled clients, special program clients, or those clients with secondary disabilities may be more difficult to serve and more prone to delays.

In order to assess the relative impact of each of these variables on the two measures of timeliness (timeliness at acceptance and timeliness at plan development and service provision), multiple regression analysis was used. The results are discussed below.

Timeliness at Acceptance

Other than absolute time in status, the variables that showed some statistically significant association to lack of timeliness at acceptance were the following:

- Severity of Disability: nonseverely disabled clients, who were 7% more likely to be judged untimely than severely disabled clients¹;
- Type of Disability: "other" disabilities, who were more likely to be judged untimely than clients with visual/aural, mental/psychological, or orthopedic/amputee disabilities; and
- Age: clients over 45 years of age, who were 11% more likely to be judged untimely than younger clients.

The variables that were related to lack of timeliness at plan development and service provision included:

- Type of Disability: clients with "other" disabilities were 26% more likely to be judged untimely than those with visual or aural disabilities;
- Previous Work Experience: Clients who had some work experience before entering VR were 19% more likely to be judged untimely than those with no work experience;
- Race: nonwhite clients were 19% more likely to be judged untimely than white clients;
- Special Program Status: 110 clients without trust fund monies were 15% more likely to be judged untimely than clients who received SSI and SSDI.
- Severity of Disability: non-severely disabled clients were 9% more likely to be judged untimely than severely disabled clients.

¹Rater's expectations that severely disabled might take more time could explain this difference.

The strong relationship between race and timeliness is particularly puzzling. Although it is not evident why these particular factors are related to judgments of timeliness, the relationships are all fairly strong. This suggests that certain client characteristics also affect timeliness and will be incorporated in a case-flagging system. An analysis of how absolute time in status varies for different groups would also yield suggestions about how to adjust time in status monitoring standards for different groups.

V. A MODEL FOR CASE TIMELINESS MONITORING

As we have seen from our review of existing state timeliness systems, there are numerous approaches to monitoring cases for undue delay. The selection of a "best approach" is not currently possible, since our analysis shows a variety of state conditions and client characteristics that may affect both the time in status itself and a rater's own assessment of the "timeliness" of a particular case. While the MEU standards pretest data shed some light on the relationships between timeliness, time in process, and outcome of cases, the limited sample and measurement issues preclude our ability to project the findings for all state VR agencies or even classes of agencies. However, this investigation does indicate that a concern for timeliness is important both for assuring the quality of case services, and for providing the best chance for successful outcomes of these services. Based on the analysis, BPA recommends:

- That any procedure recommended by RSA for monitoring of operations must be reliable across states. Trained raters should apply the same procedures and specific criteria across states if the findings are to have validity and reliability. Such an approach argues for assessments done by RSA at the regional level or by a national assessment project rather than by individual state staff.
- The procedures should focus on identification of untimely practice, overall, by type of plan, by types of client, and by status. This identification should be developed from data analysis on improved measures of timeliness and improved documentation of times in status on the R-300.
- With improved measures, more analysis can be done on the relationships between times in status and timeliness assessments, and outcome data from the R-300. Such analysis will lead to identification of norms for case flagging, and provide a component of the supportive evaluation or decision support system for RSA MIS.

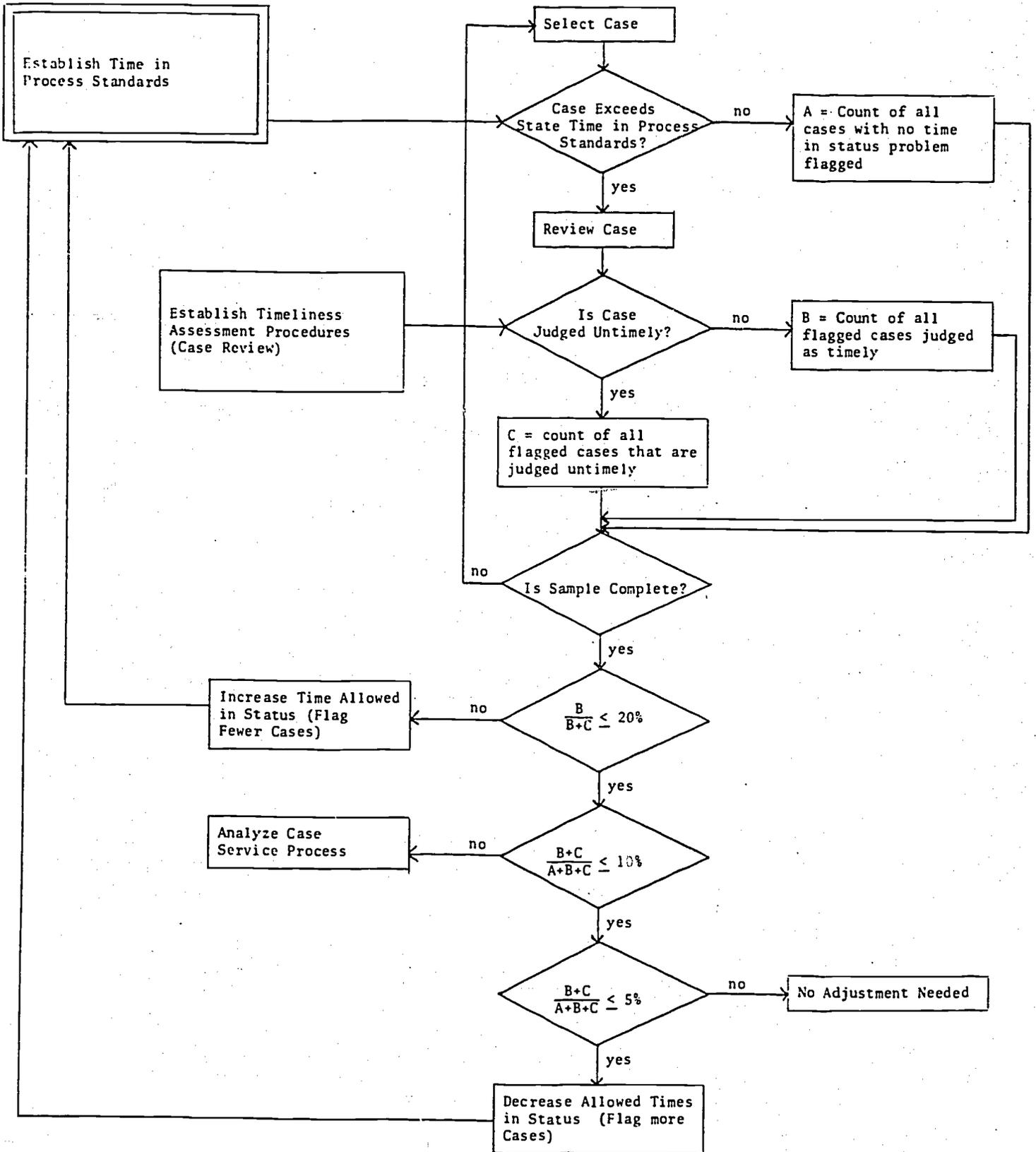
Thus, our long-run recommendation is that timeliness measures and procedures must be improved and be more uniformly applied to a large number of cases before an empirical basis for setting timeliness norms is possible. We see this developmental work as becoming more possible through the MIS, if timeliness assessments and status times are included in the data elements and if the uniform assessment practices are followed in collecting the data.

In the short run, we suggest the following model for improvement of case flagging practice and use of time-in-status standards at the state level. As we pointed out in the first chapter of this timeliness analysis, a state should not flag too many cases, because such flagging would be inefficient. However, flagging too few cases will possibly leave too many untimely cases in the system without examination. The model, therefore, is based on examining the number of cases being flagged with the states' existing flagging standards, in relationship to an analysis of the service process and the overall caseload, and refining state flagging standards.

Figure 5 shows the steps to follow in the analysis of undue delay in the caseload. A case is selected for review, following the sampling design used by the state agency for timeliness review (100% of all cases, or random sampling procedure sufficient to produce desired sample size). State timeliness standards (allowed times-in-process) will be used in this model. The model permits upwards or downwards adjusting of these time-in-process standards (increases or decreases in the maximum time allowed in each status) based on two additional suggested standards for the caseload itself:

1. Not more than 20% of flagged cases should be ultimately found to be timely. If more than 20% of the flagged cases are judged as timely when a case is reviewed, the system may be flagging cases unnecessarily, and the flagging standards could be made less stringent (times allowed in the statuses could be increased).
2. Assuming the conditions in (1) above hold, at least 5% but not more than 10% of all cases should be flagged. If such excessive flagging occurs, and the flagging represents cases judged untimely, then there may be a problem with the service

Figure 5
Model Case Flagging System



delivery system itself, and an analysis of the process is called for. If less than 5% of cases are flagged, the flagging system may be made more stringent (times allowed in statuses may be decreased).

The model in Figure 5 uses both quantitative information on times-in-status and judgmental information on timeliness to decide about cases. In the first stage, a case is selected for attention. If time-in-process is within acceptable limits for the case, it is returned to the file. If time-in-process exceeds agency standards, the case is flagged and reviewed as to the timeliness of process. As we have pointed out, while there is a relationship between timeliness and time-in-process, it is not a one-to-one relationship, so it is possible that flagged cases will be judged timely. If so, they also can be returned to the file. For both these groups returned to the file (labeled A and B on our diagram), the number of such cases should be recorded. Likewise, the number of flagged cases judged to be untimely should be counted. (In our diagram; this is C.) Cases should be flagged and reviewed until the planned sample size (A + B + C) is achieved.

Once the sample is complete, the system asks three questions of the cases. First, do the timely cases (B) exceed 20% of all flagged (B + C) cases? (If yes, the system may be flagging too many cases, and times allowed for each status could be increased.) If, however, $B/(B + C)$ is less than 20%, we ask whether less than 10% of the total caseload was flagged. If so, then the time-in-process standards appear in equilibrium for the state (not too many cases are being flagged; of the cases that are flagged, most of them are, indeed, untimely cases). If, on the other hand, more than 10% of the cases are flagged, there is a problem in the service process itself, since these cases have been judged as untimely and there are too many untimely cases for efficient monitoring and efficient operations. This calls for an examination of the service process itself, to analyze the state caseload process and pinpoint timeline issues in relationship to client outcomes and costs. In addition, this problem may call for upward adjustment of the times allowed in statuses, to flag fewer cases. However, once changes in the time-in-status standards have been

made, another iteration must be performed so that a check can be made as to whether both the 20% and 10% standards are met for a given new standards level.

Finally, we suggest that the state should routinely flag between 5% and 10% of its cases, to assure that flagging standards are set low enough. If less than 5% of cases are flagged, the standards should be made more stringent (allowed time-in-status decreased) before the next round of review.

Using this approach, states can adjust their time-in-status standards upward or downward to be more meaningful and to result in an efficient process that spots problematic cases without excessive monitoring.