

CURRENT PRACTICES IN MAINTENANCE AND REPAIR OF MOBILITY
ASSISTIVE TECHNOLOGY

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Abstract: This study had the objectives of 1) Identifying specific areas of concern for different constituents involved with the process of maintenance and repair of Mobility Assistive Technology (AT) devices, 2) Depicting and defining key aspects of the current process of maintenance and repair of AT devices and, 3) Identifying specific practices and procedures of the current AT maintenance and repair process that are most problematic.

The primary issues identified by all constituents were complexity of the current system and time necessary to complete repairs. Our research shows that both these issues arise largely due to procedures that need to be followed to acquire funding for AT services. Thus, we present a general model of the current AT maintenance and repair process. The steps outlined in this model highlight the sources of delays and difficulty in obtaining repair services. These include identification of the problem, application for prior authorization of major repairs, review and appeal in the event of denial of prior authorization, number of steps involved in obtaining funding and completion of repair job.

Keywords: preventive maintenance; repair; assistive technology; prior authorization; funding

FOOTNOTES

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Acknowledgement: The authors are grateful to Jiaying Shen for her assistance. The usual disclaimer applies.

1. See Reid et al (2002) for a survey.

2. The Census Bureau reports that more than 80 per cent of the population with disabilities was covered by some form of health insurance (private, government and/or military) in 2002.

Information available at <http://www.census.gov/hhes/www/disability/sipp/disab02/ds02t4.pdf>.

3. Though the steps outlined here pertain to the Wisconsin AT maintenance and repair process, they are general and broadly applicable to other states as well.

4. Reference: New York State Medicaid Program Durable Medical Equipment Fee Schedule, Version 2006-1 (4/1/06). Available at

http://www.emedny.org/ProviderManuals/DME/PDFS/DME_Fee_Schedule_2006.pdf.

In Wisconsin, the RP Modifier has been in effect since October 2003. "Providers may use modifier "RP" (replacement and repair) when submitting claims for miscellaneous repair parts with most wheelchair, hospital bed, patient lift, and commode chair procedure codes." Procedure codes with the "RP" modifier do not require prior authorization (PA) if all of the following are true:

1. The DME is more than one year old. Claims submitted with the "RP" modifier without PA during the first year will be denied.

2. The charge for the repair parts is \$50.00 or less.

3. Wisconsin Medicaid purchased the DME being repaired.

Reference: Wisconsin Medicaid and BadgerCare Update, Wisconsin Medicaid and BadgerCare Information for Providers, May 2004, No. 2004-41. Available at:

<http://www.dhfs.state.wi.us/medicaid/updates/2004/2004pdfs/2004-41.pdf>

5. Time limits mentioned in the figures refer to Medicare procedures. However, vendors and insurance companies have expressed the view that most private insurance companies follow these procedures as well (Dhingra et al, 2004).

6. For more details, the reader can consult <http://dhfs.wisconsin.gov/Medicaid2/handbooks/all-provider/index.htm>.

7. Reference for quotation in Figure 8: Division of Advocacy and Health Policy, 2006

8. See Parsons (1991) and more recently WATA brochure (Strategies and Tips for Funding Assistive Technology, <http://wata.org/pubs/brochures/insert.pdf>) for a similar argument.

1 INTRODUCTION

Assistive technology (AT) is essential for people with disabilities to obtain and maintain employment, and to contribute as independent members of society.¹ According to Fishman (1999), "Developments in information technologies and assistive devices have enabled people with disabilities to engage in work that they could not have done in the past, as well as created new types of jobs that some people with disabilities are capable of performing".

Empirical studies indicate that problems with AT devices are a common occurrence. In a specific study, Fitzgerald et al (2005) found that 26 per cent of the participants in their sample had completed a wheelchair repair in the past six months. A nine-state sample study and public forum records of the National Council on Disability (1993) confirm that maintenance and repair services for AT devices can be a "serious problem" which may limit the functional capacity of individual with disabilities. So, timely maintenance and repair of AT devices is an integral part of an effective AT system. The impact of inadequate maintenance and repair facilities goes beyond its effects on users' ability to carry out various activities and work. Active maintenance of AT devices can reduce the risk of equipment-related injuries and accidents (Hansen et al, 2004). But, often follow-up services are unsatisfactory (Iezzoni

¹ See Reid et al (2002) for a survey.

et al, 2002). This can increase equipment-related problems (Fuchs and Gromak, 2003). It can lead to user dissatisfaction and even technology abandonment. Indeed, Batavia, Dillard and Phillips (1990) find that high cost and limited availability of service and repair is one of the main causes of technology abandonment. Thus, a systematic analysis of the current practices of AT maintenance and repair is a necessary step in removing the obstacles to full utilisation of AT.

Constituents have often voiced their dissatisfaction over lack of adequate information about AT maintenance and repair options (Seelman, 1998 and Dhingra et al, 2004). Therefore, the objectives of this paper are to 1) Present the specific areas of concern identified by different constituents, 2) Depict and define key aspects of the current process of maintenance and repair of assistive technology devices, and 3) Identify specific practices and procedures in the current AT maintenance and repair system that are the most problematic.

Several previous papers mention the need and importance of a well-functioning maintenance and repair system for AT devices (Judge, 2000, Iezzoni et al, 2002, Fuchs and Gromak, 2003 and Strobel and McDonough, 2003). Nosek and Krouskop (1995) included study of the details of the maintenance and repair system specific to users and vendors in the Houston area. In a recent article, the Division of Advocacy and Health Policy (2006)

discussed the changes instituted in the Medicare appeals process. Our paper contributes to this literature by analyzing practices and procedures of the current AT maintenance and repair system in view of the specific experiences and concerns of its different constituents.

The remainder of the paper is organized as follows. We start with a brief discussion of the methods used in this paper (Section 2). In Section 3, we present a summary of constituent experiences with the current process of AT maintenance and repair. In Section 4, we depict and define the current process of maintenance and repair of assistive technology devices. We briefly summarize the key issues that limit the effectiveness of the current system in Section 5. Finally, we summarize our findings in Section 6.

2 METHODS

As part of our research effort, symposia were held in 2004 and 2005 at the University of Wisconsin-Madison to join together current understanding of and experiences with the AT maintenance and repair system. This laid the foundation for our research in the area. The details of methods used in this paper are provided below.

1. **Constituent Experiences:** The four constituents represented at the symposia included users of AT devices, private and governmental funding providers,

durable medical equipment repair providers and healthcare practitioners. Discussions were held with various constituents to learn about their specific experiences with the current AT maintenance and repair system. These are provided in the following section and Appendix A.

2. Characterization of AT Maintenance and Repair Process: We compiled information from several sources including the literature on disability, public health, medicine and rehabilitation issues as well as engineering and economics. Governmental websites were consulted to obtain details of funding limits and requirements. Personal interviews were conducted to obtain specific information from vendors and insurance providers (Anderson, 2004, Tackes, 2004 and Van Susteren, 2004).

3 RESULTS: CONSTITUENT EXPERIENCES

The primary objective of the first symposium was to identify specific experiences with the current AT maintenance and repair process from the perspective of each constituency involved in the process (Dhingra et al, 2004).

The specific constituents at the first symposium represented:

1. Users of AT devices (Users)
2. Durable Medical Equipment Repair Providers (DMERPs)

3. Private and Governmental Entities providing funding for AT maintenance and repair (Funding Providers)

4. Healthcare Practitioners (HPs)

Each of the constituent groups identified certain issues that are a cause of concern to them. As illustrated in Table 1, the two leading issues that each of the constituent groups identified were complexity of the current system and time necessary to complete repairs. For example, all groups indicated that the Prior Authorization (PA) approval process was a problem and needed to be improved. Again, the time necessary for PA approval was identified as an issue by all groups.

All parties identified lack of emergency services as a problem. Users and DMERPS also identified lack of preventive maintenance as an important problem. Lack of back-up equipment was another significant issue for users. Healthcare practitioners were concerned about this as well. Lack of manufacturing standards and independent equipment evaluation was a concern for all groups. Users indicated that availability of independent repair facilities was an issue. And finally, user abuse was identified as a problem by DMERPs and funding agencies. Please see Appendix A for detailed findings.

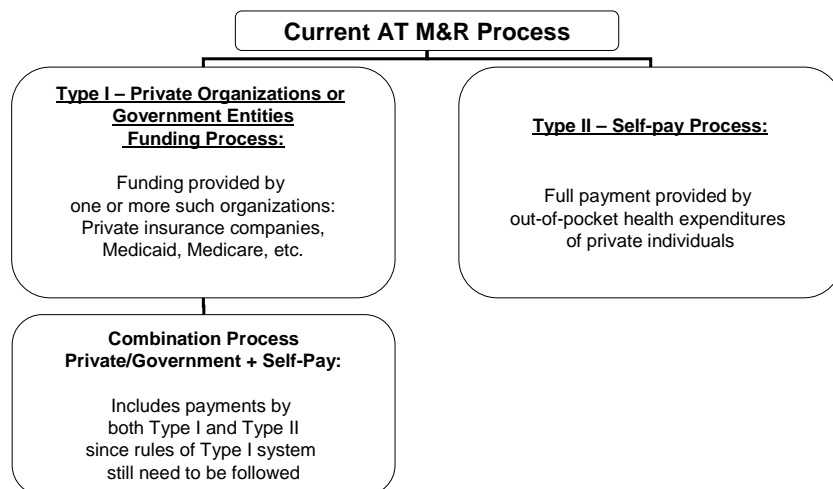
Table 1: Issues with the current system of AT maintenance and repair

Constituent Issues Identified	Users	Durable Medical Equipment Repair Provider	Organizations Providing Funding for Maintenance and Repair	Healthcare Practitioners
A. COMPLEXITY				
1. Paperwork	√	√	√	√
2. PA and Approval	√	√	√	√
3. Funding structure	√	√		
4. Number of steps	√	√		
5. Inability to understand system	√	√		√
B. TIME				
1. Time to bring chair for assessment	√	√		
2. PA and Approval	√	√	√	√
3. Procurement of Parts	√	√		
4. Time to complete repair	√	√		
C. USER ABUSE OF EQUIPMENT		√	√	
D. EMERGENCY SERVICES	√	√	√	√
E. LACK OF LOANER EQUIPMENT	√	Would provide if adequate funding available		√
F. LACK OF PREVENTIVE MAINTENANCE	√	√		
G. LACK OF MANUFACTURING STANDARDS	√	√	√	
H. LACK OF CONSUMER REPORTS	√	√	√	√
I. LACK OF INDEPENDENT REPAIR FACILITIES	√			

4 CHARACTERIZATION OF AT MAINTENANCE AND REPAIR PROCESS

In order to understand the source of delays and complexity, we first need to know the steps involved in obtaining and providing repair services under the current system. The current AT maintenance and repair process can be broadly categorized into two types - Type I involves repairs that are fully or partially funded by one or more organizations (e.g., private insurance companies, government entities such as Medicaid, Medicare etc.). Type II involves repairs that are fully paid for by private individuals or out-of-pocket expenditures (See Fig. 1). There are instances when both parties - the organization providing health insurance and the individual - split the cost of a particular service. We categorize these cases under the Type I process since the rules imposed by the funding organizations are still applicable.

Figure 1: Types of Current AT Maintenance and Repair Processes



In this paper we focus on the Type I AT maintenance and repair processes because, according to Census Bureau reports, while most people with disabilities have some form of health insurance², over a fifth of the population using AT is reported to have experienced serious problems in paying for equipment services (Hanson et al, 2003). Enders (1990) sums this as: "Little recognition has been given to the ongoing nature of a disabled person's need for technological support. Assistive technology services frequently do not fit well into our traditional delivery systems geared to cure, closure, aging out, or some other fixed end point. Significant problems,

² The Census Bureau reports that more than 80 per cent of the population with disabilities was covered by some form of health insurance (private, government and/or military) in 2002. Information available at <http://www.census.gov/hhes/www/disability/sipp/disab02/ds02t4.pdf>.

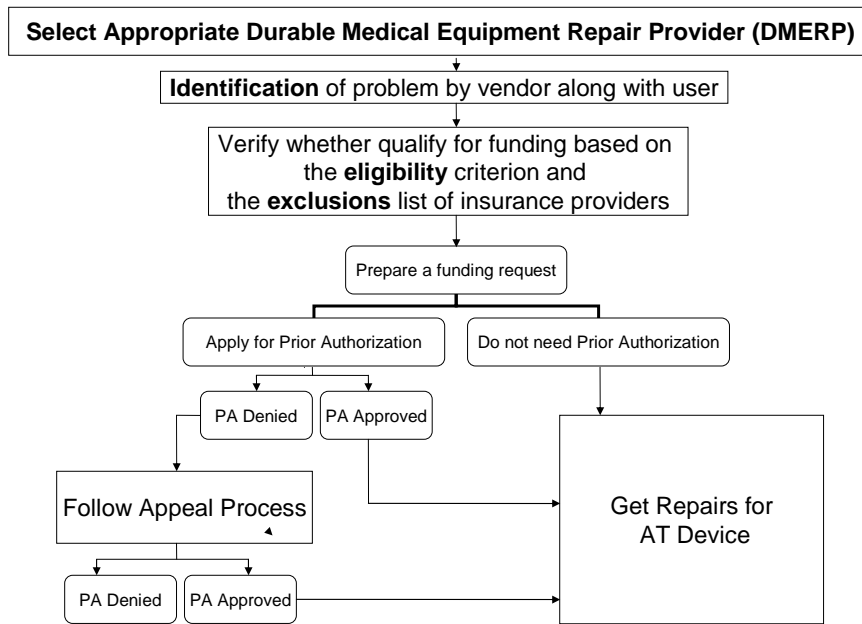
particularly related to funding, occur for example when ... the need for ongoing maintenance and replacement of the equipment occurs. Equipment was, and still is, often viewed as a one-shot event, an attitude that is reflected in the policies of many of the sources for funding assistive technology". Thus, understanding the funding process for the first type of AT services is fundamental to analyzing and defining the system of AT maintenance and repair.

In presenting a general model to characterize the Type I process, we identify the various steps involved in the process of obtaining repair services. These include identification of the problem, determination of funding source by eligibility criteria and amount required, preparation of funding request by type of repair, application for prior authorization of major repairs, options for review and appeal in the event of denial of prior authorization, completion of repair job and compensation to vendors.³

In the following flow-charts, we illustrate how a user addresses his or her need for maintenance and repair of an AT device under the Type I process. Fig. 2 lays out the broad outline and Figs. 3 to 9 provide the details regarding documentation, funding and appeals processes.

³ Though the steps outlined here pertain to the Wisconsin AT maintenance and repair process, they are general and broadly applicable to other states as well.

Figure 2: Overview of Stages involved in Type I Process



After encountering a problem or maintenance need with the AT device, the user has to decide which DMERP should provide the required AT service. The AT device is either taken to the DMERP's service site or a visit by the technician is scheduled at a chosen location. Once a technician has checked the equipment, the user and DMERP need to determine which agencies are willing to provide funds for the AT service and how much of the total expense they are willing to cover. Provisions regarding which particular items are covered by the funding agencies may change annually so a user may find that certain repair services that were paid for by the agency in an earlier year are

no longer eligible for funding in the present year. Thus, most users prefer to discuss the eligibility criteria with their DMERPs, who have more up-to-date knowledge on the subject. After checking the funding possibilities, the user, in collaboration with the DMERP has to prepare her funding request.

Since there are two different types of requirements for funding requests, we will categorize maintenance and repair services by the type of funding request needed. The first type of AT maintenance and repair services is major repairs. These services will not be paid for if they have not been authorized by the funding agency before the technician actually works on the device. For all such repair jobs, the user's funding request includes an application for prior authorization (PA). The second type of AT maintenance and repair services involves minor repairs or those repairs that can proceed without prior authorization.

In Wisconsin, for example, a major repair refers to any AT maintenance or repair service which is paid for by Medicaid and costs more than \$49.99 in uncoded Healthcare Common Procedure Code (HCPC) parts, or which requires more than five units of labor to complete. In the case of Medicare or private insurance companies, a PA is needed for all AT maintenance or repair services.

The need for a PA depends on requirements prescribed by individual states. Thus, a service that is a minor repair in one state may be a major repair in another state. For instance, in New York, Medicaid permits one repair and replacement service for durable medical equipment without a PA. The New York Medicaid Office does not require a PA for repair charges that are less than ten per cent of the price listed on the code for the device. We summarize these two definitions in figure 3.⁴

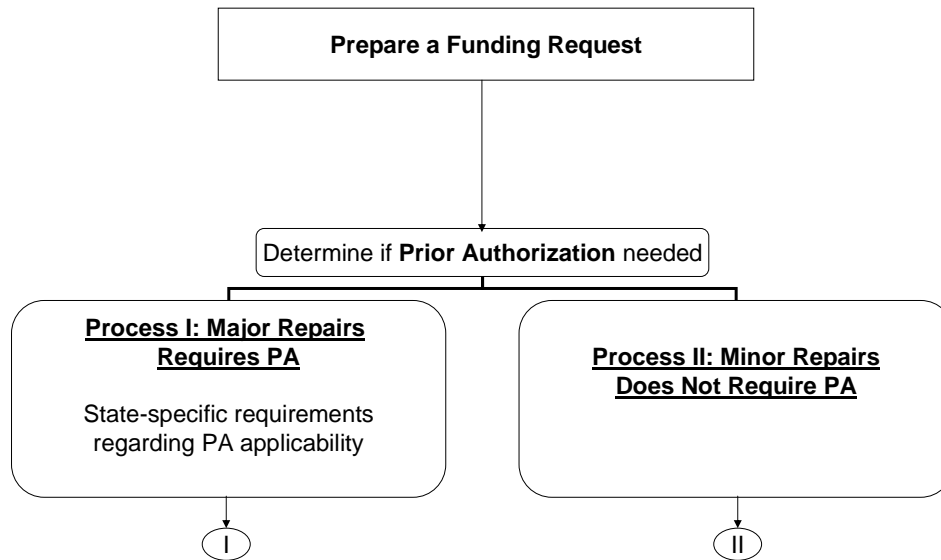
⁴ Reference: New York State Medicaid Program Durable Medical Equipment Fee Schedule, Version 2006-1 (4/1/06). Available at http://www.emedny.org/ProviderManuals/DME/PDFS/DME_Fee_Schedule_2006.pdf.

In Wisconsin, the RP Modifier has been in effect since October 2003. "Providers may use modifier "RP" (replacement and repair) when submitting claims for miscellaneous repair parts with most wheelchair, hospital bed, patient lift, and commode chair procedure codes." Procedure codes with the "RP" modifier do not require prior authorization (PA) if all of the following are true:

1. The DME is more than one year old. Claims submitted with the "RP" modifier without PA during the first year will be denied.
2. The charge for the repair parts is \$50.00 or less.
3. Wisconsin Medicaid purchased the DME being repaired.

Reference: Wisconsin Medicaid and BadgerCare Update, Wisconsin Medicaid and BadgerCare Information for Providers, May 2004, No. 2004-41. Available at: <http://www.dhfs.state.wi.us/medicaid/updates/2004/2004pdfs/2004-41.pdf>

Figure 3: Types of Repair Jobs by PA Requirement



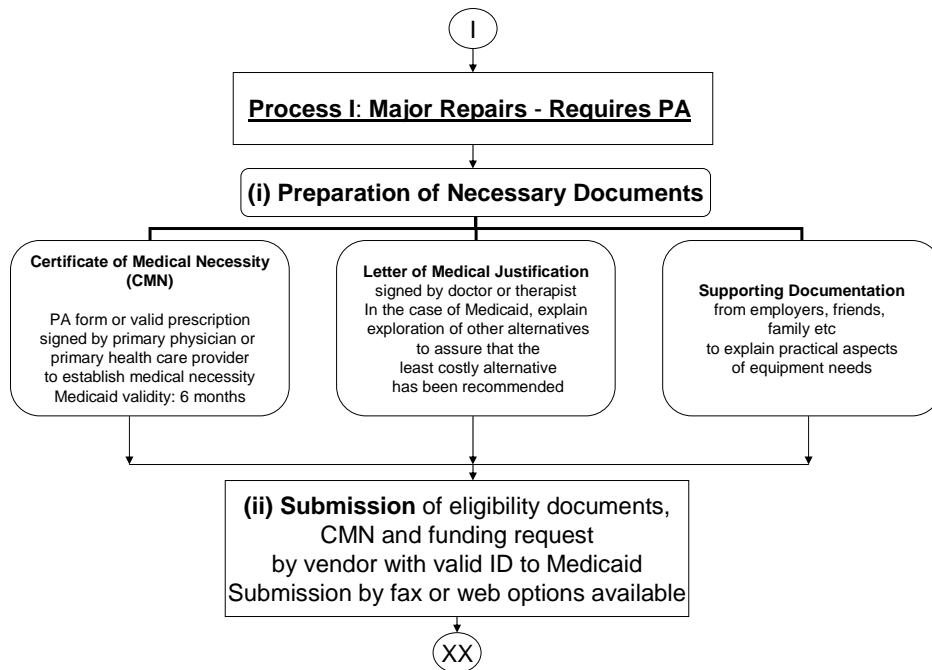
Having defined the two types of repair jobs, we now illustrate the process for major and minor repairs separately. Figs. 4, 5, 6, 7 and 8 refer to stages involved in obtaining major repairs while fig. 9 refers to steps involved in obtaining minor repairs.

Major Repairs: Process needing PA

In order to apply for funding for a major repair, the user prepares and submits a funding request to Medicaid, Medicare, and/or the private insurer. This is accompanied by documents (explained in fig. 4) and a prescription, submitted through a DMERP. Depending on the specific eligibility criteria and the amount of funds needed for a particular AT service, a user may need to apply to more than one organization for funding. With more than one funding agency involved in providing payment for the AT service, there is possibility of an extended time lag to get the device repaired. This is because each agency has its own criterion and timeline for approval of a funding request. Thus, time needed to obtain funding from one agency may compound with that needed to obtain funding from other agencies.⁵ Further, in the case of Medicaid coverage, a user cannot, in the meanwhile, make out-of-pocket payments to get the repair job done sooner.

⁵ Time limits mentioned in the figures refer to Medicare procedures. However, vendors and insurance companies have expressed the view that most private insurance companies follow these procedures as well (Dhingra et al, 2004).

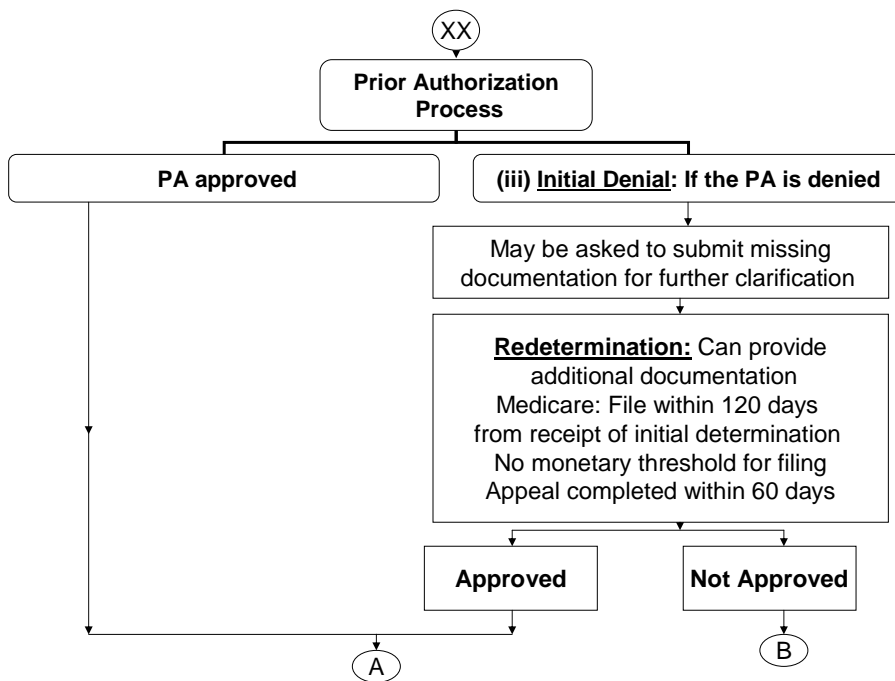
Figure 4: Documentation for Major Repair under Type I Process



If the user's application is approved by the funding agency, then repairs can be started. However, in case it is rejected, then the user can submit additional documents for “redetermination” of her request. This review is carried out by someone who was not involved in the initial decision. The new documents are reviewed by the funding agency and a decision regarding approval or denial of PA is made (See Fig. 5). If the PA is approved at this stage, then the repair

job can be started. On the other hand, if the PA is denied, then the next stage of the review process begins. Under new Medicare guidelines, the notice of redetermination action sent to the user must explain the documents needed and the procedure to be followed at the next level of review. Moreover, since 2004, Medicare has permitted “reopening” of cases. This implies that minor errors in user’s documents can be corrected. Thus, denials on account of minor errors need not go through the appeals process.

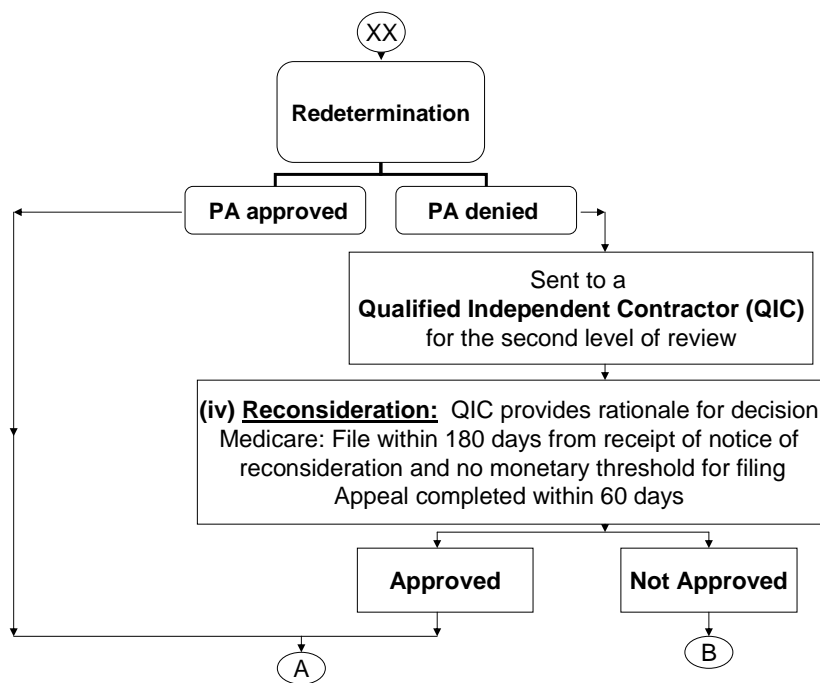
Figure 5: Initial Denial and Redetermination of PA Decision



The next level of review is the “reconsideration stage” (Fig. 6). The PA will be sent to Qualified Independent Contractors who are independent of the carriers involved in the redetermination stage. Thus, “there will no longer be

grounds for suspecting that a carrier was acting to protect itself rather than giving a truly fair hearing” (Division of Advocacy and Health Policy, 2006) In the event of denial of PA after reconsideration, the notice of reconsideration must give reasons for the decision.

Figure 6: Redetermination and Reconsideration of PA Decision



If the PA has not been approved after the two review stages, then the user can resort to the appeals process as illustrated in Figs. 7 and 8. In the case of Medicare, the user can proceed to the appeal process only after the two review stages have been “exhausted”. On the other hand, Medicaid beneficiaries may or may not need to complete the funding institution’s

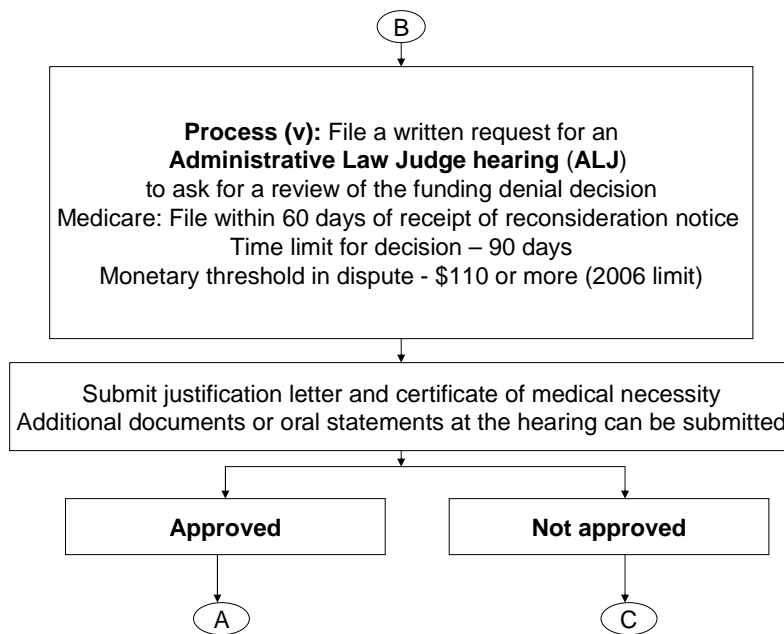
appeals process before getting a fair hearing. Medicaid exhaustion requirements are state-dependent (Claypool et al, 2005).

The hearings for PA appeals have no requirement regarding legal representation. But, it is useful to have a trained legal professional to represent the petitioner at this stage (Medicaid Fair Hearings). However, in most cases, the funding agency (whose decision is being challenged) will neither provide an attorney nor pay the legal fees during the first two levels of appeal of PA decision (Medicaid Fair Hearings).

The first hearing for appeal of PA decision is the Administrative Law Judge Hearing (Fig. 7). A justification letter and a prescription have to be submitted. Fresh documents can be submitted by the user though most fresh evidence is provided at the reconsideration level. Prior to the Medicare reforms of January 1, 2006, this part of the process could take about a year or more.⁶ However, with the new Medicare guidelines in place, if a decision is not taken in time, the users have the right to raise the case to the next level of appeal. This applies to all cases beyond the redetermination stage.

⁶ For more details, the reader can consult <http://dhfs.wisconsin.gov/Medicaid2/handbooks/all-provider/index.htm>.

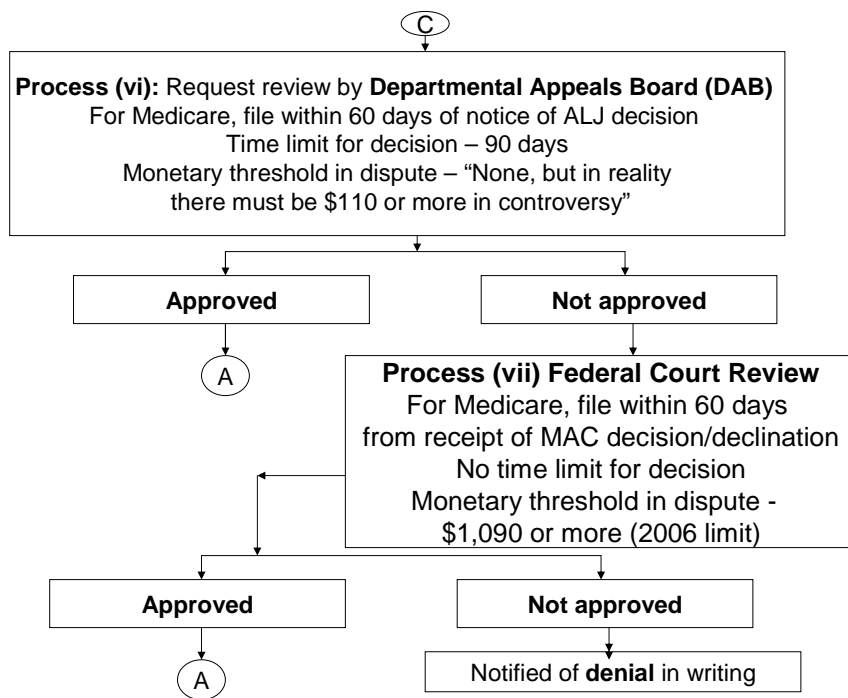
Figure 7: First Level of Appeal of PA Decision



If the first stage of the appeals process goes against the user, then she can appeal the decision at the Departmental Appeal Board but cannot provide any additional evidence (fig. 8). Once again a year or more could be spent during this stage. So, the administrative hearing and departmental appeal stages together could take about two years or more. But, this time period has been shortened by new Medicare guidelines. However, significant monetary resources still need to be spent at these two stages since lawyers are needed

to represent the case (Medicaid Fair Hearings and Neighborhood Legal Services Inc., 2005). If the departmental appeal is rejected, then the user has a last resort in terms of a final appeal for judicial review (fig. 8). There is no time limit for this stage of the process. So, the user has to wait till she receives an approval or a denial notification. In terms of monetary costs, it is possible that a successful petitioner will be able to recover legal fees spent during this stage (Medicaid Fair Hearings).

Figure 8: Second and Third Levels of Appeal of PA Decision⁷



⁷ Reference for quotation in Figure 8: Division of Advocacy and Health Policy, 2006

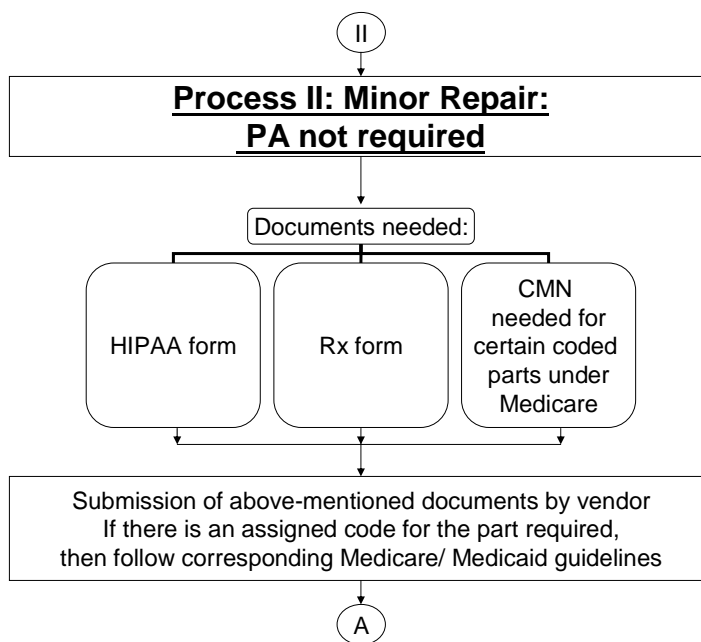
As mentioned earlier, in the case of major repairs, more than one funding agency is likely to be involved. So, the user has to follow the prior authorization process for each funding agency. Thus, the entire process could get prolonged due to a cumulative time lag in obtaining each PA. Consequently, despite the new time limits, the user could face a severe time lag in finally getting repair services for a particular major repair.

It should also be noted here that users have regularly expressed dissatisfaction with loaner equipment. Funding agencies may not provide for acquisition of back-up equipment. According to the AT M&R Survey (2006), only 37 per cent of the respondents obtained back-up equipment when their mobility device was under repair (Dhingra et al, 2006). If loaner devices are provided but are ill-suited to users' needs, it may limit their ability to carry out activities of daily living and work as well as increase the risk of injuries. Indeed, a report presented by the National Council for Disability to the President and the Congress (1993) recognizes that "Technology users must be able to obtain parts for their device(s), locate skilled repair workers, devise a way to function while the device is being repaired, and search for others to assist the financing of these activities. Functioning without a particular device or piece of equipment while it is being repaired may leave an individual with disabilities without mobility or a means of communication. Yet public agencies and the health care system have not responded to this critical problem".

Minor Repairs: Process without PA

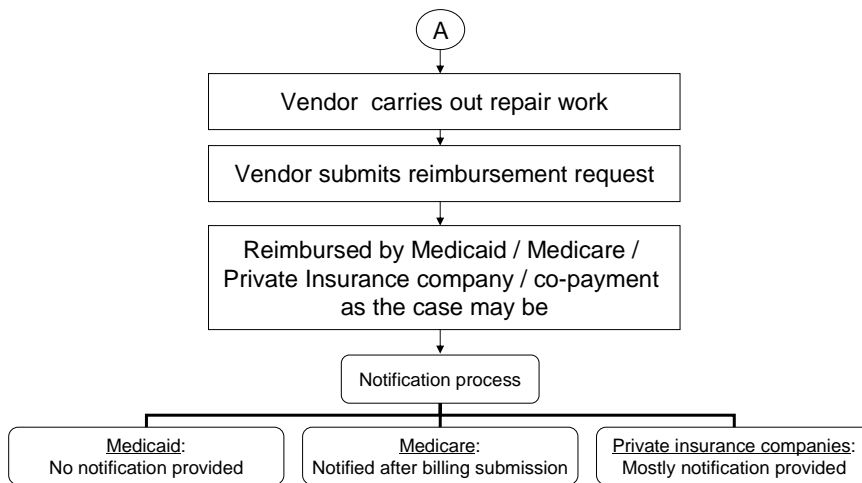
Here we explain the process for obtaining funding for a minor repair. This process does not require a PA. But, depending on the particular repair needed, the user has to submit a prescription and follow the guidelines outlined by the funding agency. These details are provided in figure 9. This process is remarkably simpler than the one that requires a PA. But, most repairs do not fall under the category of minor repairs, so it has limited applicability in practice.

Figure 9: Type I process without PA



Once the necessary documents for a minor repair have been submitted or the major repair approved, the technician can work on the AT device. After the technician has finished the repair work, she submits a reimbursement request to the funding agency. She may or may not be notified of reimbursement, depending on the funding agency involved (Fig. 10). Though this stage of the process seems immediate, it should be kept in mind that the waiting time to get repair from a vendor can be long. So, there may be further delay in getting the AT device in working order.

Figure 10: Vendor's Job in Type I Process



5 DISCUSSION: SPECIFIC ISSUES WITH AT MAINTENANCE & REPAIR PRACTICES

The flow-charts in Section 3 define the current process for obtaining AT maintenance and repair services. We will now consider each step outlined in Section 3 in view of the experiences of constituents presented in Section 2. The study of the current AT maintenance and repair practices combined with the issues identified by constituents leads to the following set of issues needing to be considered when contemplating improvements in the system:

1. Adequacy of repair facilities and waiting time for access to technicians (fig. 3)
2. Consistency of exclusions list of insurance providers (fig. 3)
3. Consistency of eligibility criteria of funding agencies (fig. 3)
4. Response lags for PA (figs. 5 and 6)
5. Cascading effect of time delays
6. Length and cost of adjudication process. (legal fees - figs. 7 and 8)
7. Availability of systematic information regarding adjudication process

8. Ability to make out-of-pocket payments to speed up process in certain cases

9. Threshold value for minor repairs (without PA)

10. Waiting times to get needed parts for AT devices (fig. 10)

11. Waiting time to get DMERP services (fig. 10)

12. Availability of appropriate back-up equipment during repair period

13. Number of steps involved in obtaining funding

The primary issues identified by all constituents were complexity of the current system and time necessary to complete repairs. Our research shows that both these issues arise largely due to procedures that need to be followed to acquire funding for AT services.⁸ The steps outlined in our general model of AT maintenance and repair process highlight the sources of long delays and difficulty in obtaining repair services faced by users. These include identification of the problem, application for prior authorization of major

⁸ See Parsons (1991) and more recently WATA brochure (Strategies and Tips for Funding Assistive Technology, <http://wata.org/pubs/brochures/insert.pdf>) for a similar argument.

repairs, review and appeal in the event of denial of prior authorization, number of steps involved in obtaining funding and completion of repair job. These specific features of funding requirements of the current AT maintenance and repair system can lead to time delays in obtaining repair services, higher cost of repair services and considerable confusion among users.

The experiences that we have laid out in this paper are consistent with the findings of Nosek and Krouskop (1995). They surveyed consumers and vendors in sixteen independent living centers within the Houston area to assess the effectiveness of an AT maintenance program for mobility equipment. Nosek and Krouskop identified "lack of available services to maintain mobility equipment in good working order, no centralized information and evaluation system, denials of needed equipment by third party payers, and high equipment costs" as the primary problems faced by users and vendors. Our research provides a more specific analysis of these issues and links the particular problems with the procedures involved in the AT maintenance and repair process.

6 SUMMARY

Constituents have expressed concern with the current system of obtaining maintenance and repair services for AT devices. However, details of the

procedural aspects of obtaining AT maintenance and repair service are missing. This paper has tried to fill that gap by presenting the key issues identified by each party in the AT maintenance and repair process. We have also addressed user concern regarding lack of information about the working of the system by presenting a general model which characterizes current AT maintenance and repair practices that involve funding from private or governmental agencies. Our findings are summarized below.

- The primary issues identified by all constituents were complexity of the current system and time necessary to complete repairs.
- The steps outlined in our general model can assist in identifying sources of long delays and difficulty in obtaining repair services. These include identification of the problem, application for prior authorization of major repairs, review and appeal in the event of denial of prior authorization, and the number of steps involved in obtaining funding.

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Appendix A:

A summary of other areas identified by each constituent is provided below.

Summary of Experiences, Activities, and Responsibilities

USERS

User experiences with maintenance and repair can be summarized by the following list:

1. Lengthy time for repairs (more than 1 month for simple repairs such as tire replacement)
2. Confusion about repair process: What is the process? Who is involved? Who pays for what?
3. Problems with equipment on delivery, particularly because of model changes in AT which do not work with other AT in use. For example, a change in wheelchair model may mean that the tie down system used in the users van may not work without modification.
4. Travel problems, particularly when traveling via commercial airplane
5. Lack of familiarity of technicians with specific equipment

6. Limited choices for repair

Finally, users felt that in addition to the DME providers, consumer experience and review could be an important source of information regarding choice of appropriate AT. However, any organized review mechanism is not available to users.

DURABLE MEDICAL EQUIPMENT PROVIDERS

Durable Medical Equipment (DME) provider experience with maintenance and repair of AT can be summarized as follows:

1. Insufficient reimbursement rates: Reimbursement rates from Medicaid and private insurance companies are not sufficient to cover all expenses incurred by the DME in providing the repair service.
2. Large volume of repairs: Number of repairs needed versus the ability of the DME to complete repairs means that repairs have to be prioritized based on medical needs of users.
3. Lack of consistency in standards and design among different manufacturers

4. Difficulty with repair because of individualization and customization of wheelchairs

HEALTHCARE PRACTITIONERS

Healthcare Practitioners experience with maintenance and repair of AT include:

1. Lack of understanding on the part of consumers of the need to consider multiple sources for support of AT

2. Insufficient funds to cover AT devices suitable for individual's need

3. Lack of standardization of insurance policies

4. Fragmentation in current system

5. Delays from requirement of a physician's signature on justification letter

6. Therapists often end up in an advocacy role for user

INSURANCE AND GOVERNMENT SUPPORT AGENCIES

Insurance company and government support agency experience with maintenance and repair includes:

1. AT use misunderstandings: Insurance companies face problems with misunderstandings of what AT is medical necessary versus AT that will facilitate activities of daily living.
2. Confusion because law does not mandate that insurance providers must provide AT
3. Lack of understanding of process by consumers
4. Differences in cutoff levels for prior authorizations