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March 15, 2004

Edward L. Humpert, M.D., M.S.
Medical Director, North Carolina Intermediary Medical Affairs
Palmetto GBA
800 South Duke Street
Durham, NC 27701

Re: Proposed Local Medical Review Policy on Inpatient Rehabilitation Medical Necessity: LMRP Policy Number 04-03.

Dear Dr. Humpert:

On behalf of our nearly 5,000 member hospitals, health care systems, networks and other providers of care, including 960 inpatient rehabilitation facilities, the American Hospital Association (AHA) appreciates the opportunity to comment on Palmetto GBA's (Palmetto) draft local medical review policy (LMRP) concerning inpatient rehabilitation medical necessity. While the AHA is encouraged by the changes Palmetto has made to the draft proposal in recent months, in consultation with inpatient rehabilitation providers in North Carolina, several aspects of the proposal continue to concern us.

Consistent with the stipulations of the Medicare Prescription Drug and Modernization Act of 2003 and the Consolidated Appropriations Act of 2004, **the AHA continues to call for a delay in all policymaking related to inpatient rehabilitation, including this proposal, so that a panel of experts can be convened to establish a clinical consensus on whether and how to modify existing inpatient rehabilitation medical necessity criteria and clinical conditions in the inpatient rehabilitation "75% Rule**." Such a panel's work would provide a framework for national policymaking on inpatient rehabilitation facility (IRF) medical necessity to ensure consistent application across the country. Given pending revisions to the 75% Rule, we consider local rulemaking on inpatient rehabilitation to be premature. Because LMRPs must be consistent with federal statutes, regulations and guidelines, all fiscal intermediaries (FIs) should wait for conclusive action on the 75% Rule before implementing revisions to local coverage policies for inpatient rehabilitation.

We respectfully suggest that Palmetto further consider adopting several key principles of the draft local coverage determination (LCD) introduced January 19, 2004 by the Centers for Medicare and Medicaid Services (CMS) FI AdminaStar. The AHA is very encouraged by

AdminaStar's position that a patient's need for inpatient rehabilitation should be based on the patient's ability to regain function lost due to an injury or illness, and not solely on diagnosis. As such, we strongly endorse AdminaStar's decision to forgo diagnosis-specific parameters among the criteria to determine medical necessity. We also support the LCD's recognition that denials of service based on screening criteria are inappropriate and that cases denied as a result of an initial screen should be referred to a physician with experience in medical rehabilitation for individual review, based on clinical expertise, experience and other resources. We urge Palmetto to revisit these issues and give strong consideration to incorporating these notable elements of the Administar proposal.

Current Medical Necessity Standards are Effective

CMS' inpatient rehabilitation medical necessity standards are found in Chapter 1, Section 110 of the Medicare Benefit Policy Manual, which replaced on October 1, 2003, the CMS Hospital Manual Section 211. These standards are based on inpatient rehabilitation medical necessity and appropriateness of admission criteria finalized in 1980 by the American Academy of Physical Medicine and Rehabilitation and the American Congress of Rehabilitation Medicine. These standards for IRF admission were validated by CMS and have been widely accepted by the field.

These rigorous standards have resulted in the vast majority – 98 percent – of acute discharges being referred to settings other than an IRF (Analysis of 2002 Medpar data). **Clearly, in most cases, these criteria are effectively distinguishing patients requiring intensive, multidisciplinary rehabilitation care from those who are suitable for a less intensive rehabilitation setting.** The slow growth of IRF Medicare expenditures from 1992 through 2001 reported by the Medicare Payment Advisory Commission, with growth rates ranging from 2.8 percent to 4.2 percent per year, also indicates that the screening criteria are deterring inappropriate admissions to IRFs. This growth rate is far below that of other post-acute providers reimbursed by Medicare. **This 10-year pattern of stable growth illustrates the capacity of the existing medical necessity framework to prevent erratic and unwarranted growth in the field due to inappropriate IRF admissions.**

Palmetto should note that Section 110 of the Benefit Policy Manual is currently subject to additional modifications by CMS that are necessary to bring the policy into conformance with related policies. To ensure consistency, pending changes to Section 110 also will require modifications to related LMRP/LCDs, CMS FI manuals and other affected guidelines. Therefore, Palmetto and other FIs should treat the new Section 110 guidelines as a work in progress rather than final policy.

LMRP Must Preserve Physicians' Decision-Making Role

The Palmetto proposal appropriately acknowledges the leadership and decision-making role of the overseeing physician in guiding the multidisciplinary team to develop and execute an individualized care plan for each patient. However, the diagnosis-specific parameters in the "Indications" section of the proposal would wrongly diminish these roles by focusing on pre-set guidelines that restrict the ability of the referring and receiving rehabilitation physician to make case-by-case determinations on the need for inpatient rehabilitation care and the appropriate

course of care for each patient. Furthermore, since aspects of these criteria are inconsistent with both prevailing medical practice and the medical literature, Palmetto should strongly consider omitting these criteria. Doing so would reinforce rather than restrict the role of physicians' expert clinical judgment in determining which patients are clinically appropriate for inpatient rehabilitation, within the parameters set by the Benefit Policy Manual.

Section 110.4 Screening Criteria Should be Fully Cited

The medical necessity standard put forth in Section 110 requires that:

1) inpatient rehabilitation care be medically necessary for the patient's condition, and
2) inpatient level care – rather than less intensive rehabilitation care provided in another setting – be medically necessary.

If both of these criteria are met, then an assessment is conducted using the pre-set screening criteria established in Section 110.4, and referred to in the "Abstract" and "General Indications" sections of the draft LMRP, to determine if the patient meets the criteria for an IRF admission. For any patient who fails to satisfy the screening criteria, the case should be referred to a physician with experience in medical rehabilitation to determine, on a case-by-case basis using individual clinical expertise, experience, and other resources, whether the patient is clinically appropriate for an IRF admission.

The condensed version of the screening criteria noted in the "Abstract" and "General Indications" sections of the draft LMRP inappropriately paraphrase the screening criteria, as established in Section 110. The missing provisions provide substantive clarification and understanding for providers and should not be omitted. Until the findings and recommendations of a clinical panel of experts become available, the field supports continued use of Section 110, in its entirety, as a stringent but fair standard for inpatient rehabilitation medical necessity.

For all references to the patient screening process, the LMRP should explicitly refer the case reviewer to a fully articulated version of the screening criteria, which should be included in complete form within the LMRP text. In addition, the LMRP should note that the fully articulated requirements should be used during initial patient assessments to establish whether inpatient rehabilitation care is medically necessary for a patient, on a case-by-case basis. Furthermore, the LMRP should clarify that these criteria are not an absolute threshold since, as an exception, certain patients may be appropriately deemed medically eligible for inpatient rehabilitation by an admitting IRF physician even if they do not meet all of the criteria listed. Finally, it also should be clarified that screening criteria, in full or abbreviated form, are not used during physician review. Instead, the physician should draw upon individual medical expertise and clinical experience to determine each patient's individual rehabilitation care needs.

Draft LMRP is Inconsistent with Program Integrity Manual

We commend Palmetto for their extensive efforts to involve local inpatient rehabilitation providers in the development of the draft LMRP. The dialogue between FI and providers is a healthy process and required by Chapter 13 of the CMS Medicare Program Integrity Manual. Chapter 13 states that LMRPs are an "administrative and educational tool" that may not "restrict or conflict with . . . coverage provisions in interpretive manuals" such as the Benefit Policy

Manual. However, **rather than serving solely as an "administrative and education tool," some components of the diagnosis-specific section of the draft LMRP would restrict Medicare coverage of IRF services, as outlined in the Benefit Policy Manual, denying beneficiaries access to care in the most appropriate setting, without the clinical literature to substantiate the draft policy**.

Proposal Cites Weak Scientific Sources

Chapter 13 requires FIs to base LMRPs "on the strongest evidence available" and states that:

"In order of preference, the LMRPs should be based on:

- *published authoritative evidence derived from definitive randomized clinical trials or other definitive studies, and*
- *general acceptance by the medical community (standard of practice), as supported by sound medical evidence based on:*
  - *Scientific data or research studies published in peer-reviewed medical journals;*
  - *Consensus of expert medical opinion (i.e., recognized authorities in the field); or*
  - *Medical opinion derived from consultations with medical associations or other health care experts."*

Chapter 13 also states, "the extent and quality of supporting evidence is key to defending challenges to LMRPs" and states that a "broad range of available evidence must be considered and its quality must be evaluated before a conclusion is reached."

The medical sources cited by the Palmetto draft LMRP are very similar to the sources cited by the draft LMRPs proposed in 2003 on this same issue by four other CMS FIs[1] and fail to meet these standards. These four earlier draft LMRPs demonstrate a blatant disregard for these standards and fail to meet both the "strongest evidence available" requirement and directly contradict many prevailing inpatient rehabilitation standards of practice. The 23 citations in the "Sources of Information and Basis for Decision" section of the Palmetto proposal include only two new sources and lack 11 of the documents cited by the earlier LMRPs. Therefore, the vast majority of the citations in Palmetto's proposal – 21 of 23 – are the same resources used by the 2003 LMRPs, which have been highly criticized for weak to non-existent relevance to the contents of the proposal.

The Rehabilitation Institute of Chicago's (RIC) Center for Rehabilitation Outcomes Research was highly critical of the collection of clinical sources in the 2003 LMRPs. Below is an excerpt of the RIC's assessment of the medical literature cited by these LMRPs, as noted in their October 28 LMRP comment letter to CMS.

> "The failure of the authors to meet accepted standards of review methodology and the evidence provided by the literature cited in these draft recommendations is often of such poor quality (omissions, exclusions, and poor design) that it is unclear that the reviewers could have come to any conclusions, let alone the ones they did. **The quality of the studies is often poor, any effects found are generally small, the populations studied are extremely heterogeneous, and there are multiple plausible competing explanations of the observed effects**."

[1] 2003 Proposed Local Medical Review Policies on Inpatient Rehabilitation Medical Necessity: BCBS of AL – L13670; BCBS of GA – L13675; Riverbend – L13627; Veritus – 03-008.

And further, "Given the literature cited, there is simply not enough evidence provided to draw the conclusions that the authors did about the circumstances and conditions under which inpatient rehabilitation is medically necessary or unnecessary..." Given the RIC's status as one of the premier medical rehabilitation research organizations in the nation, these assessments must not be overlooked. **These findings raise fundamental questions about the medical relevance of the sources cited by the 2003 LMRPs, and in large part by the Palmetto draft LMRP.**

The currently limited selection of clinical research on which to base significant changes to the existing medical necessity standards reinforces our recommendation to stop local rulemaking on inpatient rehabilitation, and allow a clinical panel of rehabilitation experts to be convened to develop a clinical consensus on which to base a fair and reasonable policy. At this time, a clinical consensus developed by a multi-disciplinary team of experts in medical rehabilitation would be a constructive step toward ensuring medical necessity standards that are fair and reasonable on a nationwide basis.

For future work on inpatient rehabilitation policy, we encourage Palmetto to consider the journal articles noted in Attachment B, which were not cited in the draft LMRP. This list was developed by a group of rehabilitation experts and should be considered by CMS and its FIs when designing policy on inpatient rehabilitation.

LMRPs Overemphasize Diagnosis and Other Fixed Criteria

The draft LMRP states the intention to use functional loss as the guiding factor in determining medical necessity, but contradicts itself by also establishing the importance of the specific diagnosis in admission decisions. Chapter 13 of the Program Integrity Manual explicitly prohibits such pre-set "rules of thumb." The diagnosis-specific limitations undermine the significance of patient functionality and role of the physician in using clinical judgment during the admission of a patient and discourage the application of individual case analysis. In addition, the diagnosis-specific guidelines fail to recognize the role of IRFs in providing care that integrates the treatment of each patient's medical *and* functional needs.

An IRF admission is made if a patient's function has been affected by an impairment, and there is a medical basis for intense program of rehabilitation services, supervision by physicians and nurses with specialized training in medical rehabilitation, that are likely to result in meaningful functional improvement in a reasonable period of time. This comprehensive and medically rational foundation for assessing inpatient rehabilitation medical necessity is supported by Chapter 110. IRFs appropriately treat the entirety of each patient in the context of their overall medical condition when the patient meets the clinical thresholds for medical necessity established in Chapter 110. Depending on the individual, secondary diagnoses may appropriately influence the medical decision to admit a patient into an IRF due to the added complexity of the treatment plan that is required to restore function. The AHA is concerned that case reviewers using the Palmetto guidelines may inappropriately use the diagnosis-specific guidelines as short cuts that substitute for the review of the entire medical record and assessment of the whole patient. **Therefore, the AHA asks that all diagnosis-specific guidelines be deleted from the proposed LMRP.**

LMRP Coding Conventions Would Create Inconsistencies and Confusion

The draft LMRP proposes coding provisions that are inconsistent with the Official Coding Guidelines validated by four cooperating parties, including CMS. **To ensure standardized use and application of all clinical codes, providers, CMS, and FIs should follow the Official Coding Guidelines.** Implementing such inconsistencies would create confusion for FIs and providers alike. We also are concerned that the proposed coding inconsistencies with UB92 billing may be out of compliance with the Health Insurance Portability and Accountability Act (HIPAA).

- When determining medical necessity, FIs should rely on the clinical codes reported on the UB92 claim form rather than the Inpatient Rehabilitation Facility Patient Assessment Instrument diagnoses codes, which are different. The LMRP is unclear on this matter.

- The LMRP fails to recognize that under the Official Coding Guidelines**,** IRFs may use the V57 code for a primary diagnosis. According to the Official Coding Guidelines, an exception to the principal diagnosis coding rules allows reporting of V57 code as the principal diagnosis for "care involving use of rehabilitation procedures."

- The LMRP's definition of "secondary diagnoses" also is inconsistent with the established definition published in the Official Coding Guidelines and fails to capture many allowable secondary conditions. Under the Official Coding Guidelines "secondary diagnoses" include conditions "requiring clinical evaluation; or therapeutic treatment; or diagnostic procedures; or extended length of hospital stay; or increased nursing care and/or monitoring." Allowed secondary diagnoses include a broad list of conditions and comorbidities that coexist at the time of admission, that develop subsequently, or that affect the treatment received and/or the length of stay.

- The LMRP coding provisions also would be inconsistent with HIPAA which references use of the Official Coding Guidelines as part of its electronic billing standards on transactions and clinical coding.

LMRPs Would Create a Burden on the Entire Health Care System

This LMRP would not only limit access to clinically appropriate care for patients, it also could cause a reduction in services by inpatient rehabilitation providers in North Carolina. Such cutbacks in IRF services would have a broader negative effect. A reduction in IRF access would be particularly burdensome in rural communities and communities with acute hospitals that are already challenged with capacity limitations.

While we commend Palmetto for engaging in substantial communication with the field during the development of the draft LMRP, our concerns noted above – and in particular, the problems related to the diagnosis-specific parameters – compel us to recommend that either the proposal be delayed so that a panel of inpatient rehabilitation experts can be convened

or the proposal should undergo further modifications to ensure appropriate access to care for Medicare beneficiaries. Thank you for considering our remarks on the proposed LMRP. If you have any questions about our comments, please feel free to contact me or Rochelle Archuleta, senior associate director for policy, at (202) 626-2320.

Sincerely,

Rick Pollack
Executive Vice President

Medicare Benefit Policy Manual
Chapter 1; Section 110

Inpatient Rehabilitation Screening Criteria

(Effective 10-1-2003)

Special Note on Pending Changes to Section 110: The current medical necessity guidelines in section 110 of the online Medicare Benefit Policy Manual replaced Section 211 of the Hospital Manual in October 2003; however it should be noted that additional modifications to the new guidelines are pending. To ensure consistency with other related policies, conforming changes will also be required for related LMRPs/LCDs, FI manuals and other affected guidelines. The field has noted that in converting the screening criteria from the Hospital Manual to the Benefit Policy Manual, substantive changes were made in the screening criteria that did not undergo the scrutiny of public hearing or comments, and as such, these changes must be revisited by CMS. Therefore Palmetto and other FIs should treat the new section 110 guidelines as a work in progress rather than a finalized policy.

110.4 - Rehabilitation Hospital Screening Criteria

(Rev. 1, 10-01-03)
A3-3101.11.D, HO-211.D

Rehabilitative care in a hospital, rather than in a SNF or on an outpatient basis, is reasonable and necessary for a patient who requires a more coordinated, intensive program of multiple services than is generally found out of a hospital. A patient probably requires a hospital level of care if they have either one or more conditions requiring intensive and multi-disciplinary rehabilitation care, or a medical complication in addition to their primary condition, so that the continuing availability of a physician is required to ensure safe and effective treatment.

The QIOs will review rehabilitation services if they are rendered at the inpatient facility as part of that particular admission.

The CMS has developed a set of screening criteria to assist the QIOs in applying this level-of-care requirement. The criteria (which are listed below) are designed to enable the QIOs to identify those cases that clearly involve a hospital level of rehabilitative care. The QIOs are expected to use these criteria in performing their screens of rehabilitative hospital claims. Thus, if a case satisfies each of the criteria, the QIO may approve the claim at the initial screening level. However, the fact that a case fails to satisfy the criteria does not mean that the QIO denies the claim. Rather, it only means that the QIO refers the case to a physician reviewer for a determination as to the medical necessity of the patient's hospitalization.

These criteria set forth below are intended to be applied only at the initial screening level (which is typically conducted by the QIO's nurse reviewer). The criteria do not apply to

cases referred to a QIO's physician reviewer. For determinations about reasonableness, medical necessity, and appropriateness of setting, the QIO's physician reviewer is expected to make a determination on the basis of their knowledge, expertise and experience, and upon an assessment of each beneficiary's individual care needs rather than on fixed criteria.

At the initial screening, a QIO determines that the patient requires a rehabilitative hospital level of care if all of the following screening criteria are met.

110.4.1 - Close Medical Supervision by a Physician With Specialized Training or Experience in Rehabilitation

(Rev. 1, 10-01-03)
A3-3101.11.D.1, HO-211.D.1
A patient's condition must require the 24-hour availability of a physician with special training or experience in the field of rehabilitation. This need should be verifiable by entries in the patient's medical record that reflect frequent and direct, and medically necessary physician involvement in the patient's care; i.e., at least every two to three days during the patient's stay. This degree of physician involvement which is greater than is normally rendered to a patient in a SNF is an indicator of a patient's need for services generally available only in a hospital setting.

110.4.2 - Twenty-Four Hour Rehabilitation Nursing

(Rev. 1, 10-01-03)
A3-3101.11.D.2, HO-211.D.2
The patient requires the 24-hour availability of a registered nurse with specialized training or experience in rehabilitation.

110.4.3 - Relatively Intense Level of Rehabilitation Services

(Rev. 1, 10-01-03)
A3-3101.11.D.3, HO-211.D.3
The general threshold for establishing the need for inpatient hospital rehabilitation services is that the patient must require and receive at least three hours a day of physical and/or occupational therapy. (The furnishing of services no less than five days a week satisfies the requirement for "daily" services.) While most patients requiring an inpatient stay for rehabilitation need and receive at least three hours a day of physical and/or occupational therapy, there can be exceptions because individual patient's needs vary. In some instances, patients who require inpatient hospital rehabilitation services may need, on a priority basis, other skilled rehabilitative modalities such as speech-language pathology services, or prosthetic-orthotic services and their stage of recovery makes the concurrent receipt of intensive physical therapy or occupational therapy services inappropriate. In such cases, the 3-hour a day requirement can be met by a combination of these other therapeutic services instead of or in addition to physical therapy and/or occupational therapy.

An inpatient stay for rehabilitation care can also be covered even though the patient has a secondary diagnosis or medical complication that prevents participation in a program consisting of three hours of therapy a day. Inpatient hospital care in these cases may be the only reasonable means by which even a low intensity rehabilitation program may be carried out. The

intermediary secures documentation of the existence and extent of complicating conditions affecting the carrying out of a rehabilitation program to ensure that inpatient hospital care for less than intensive rehabilitation care is actually needed.

110.4.4 - Multi-Disciplinary Team Approach to Delivery of Program

(Rev. 1, 10-01-03)
A3-3101.11.D.4, HO-211.D.4
A multidisciplinary team usually includes a physician, rehabilitation nurse, social worker and/or psychologist, and those therapists involved in the patient's care. At a minimum, a team must include a physician, rehabilitation nurse, and one therapist.

110.4.5 - Coordinated Program of Care

(Rev. 1, 10-01-03)
A3-3101.11.D.5, HO-211.D.5
The patient's records must reflect evidence of a coordinated program, i.e., documentation that periodic team conferences were held with a regularity of at least every two weeks to:

- Assess the individual's progress or the problems impeding progress;
- Consider possible resolutions to such problems; and
- Reassess the validity of the rehabilitation goals initially established.

A team conference may be formal or informal; however, a review by the various team members of each other's notes does not constitute a team conference. The decisions made during such conferences, such as those concerning discharge planning and the need for any adjustment in goals or in the prescribed treatment program, must be recorded in the clinical record.

110.4.6 - Significant Practical Improvement

(Rev. 1, 10-01-03)
A3-3101.11.D.6, HO-211.D.6
Hospitalization after the pre-admission screening is covered only in those cases where the pre-admission screening results in a conclusion by the rehabilitation team that a significant practical improvement can be expected in a reasonable period of time. It is not necessary that there be an expectation of complete independence in the activities of daily living, but there must be a reasonable expectation of improvement that is of practical value to the patient, measured against the patient's condition at the start of the rehabilitation program. For example, a multiple sclerosis patient's condition may have deteriorated as a result of a secondary illness. To be restored to a level of function before the secondary illness, the patient may require an intensive inpatient hospital rehabilitation program. While such a program does not restore the level of function before multiple sclerosis developed, a return to pre-secondary illness level is considered to be a "significant practical improvement" in the condition. In addition, a beneficiary must classify into one of the CMG’s payable by Medicare under the IRF PPS.

110.4.7 - Realistic Goals

(Rev. 1, 10-01-03)
A3-3101.11.D.7, HO-211.D.7
While there may be instances where an intense rehabilitation program may enable a Medicare patient to return to the labor market, vocational rehabilitation is generally not considered a realistic goal for most aged or severely disabled individuals. The most realistic rehabilitation goal for most Medicare beneficiaries is self-care or independence in the activities of daily living; i.e., self-sufficiency in bathing, ambulation, eating, dressing, homemaking, etc., or sufficient improvement to allow a patient to live at home with family assistance rather than in an institution. Thus, the aim of the treatment is achieving the maximum level of function possible.

110.5 - Length of Rehabilitation Program

(Rev. 1, 10-01-03)
A3-3101.11.E, HO-211.E
Coverage stops when further progress toward the established rehabilitation goal is unlikely or when further progress can be achieved in a less intensive setting. In deciding whether further care can be carried out in a less intensive setting, both the degree of improvement that has occurred and the type of program required to achieve further improvement must be considered. In some cases, an individual may be expected to continue to improve under an outpatient program. There are other situations where further improvement in the individual's ability to function relatively independently in the activities of daily living can be expected only if a multidisciplinary team effort is continued.

While occasional home visits and other trips into the community are factors in determining whether continued stay in the hospital is necessary, such excursions alone are not a basis for concluding that further hospital care is not required. Planned home visits and trips to the community are frequently used to test the individual's ability to function outside the institutional setting and assist in discharge planning for the individual.

It is also important to consider how close the patient may be to the planned end of the rehabilitation hospital stay when further progress becomes unlikely. If a patient is within a few days of discharge, transfer to a less intensive setting in another facility would be inappropriate even though further progress in the hospital setting is unlikely. However, it could be appropriate to utilize a "swing bed" arrangement, if it exists in the same facility, for rendering necessary services to the patient pending discharge. When discharge or transfer to another facility is appropriate, the cut-off point for coverage should not be the last day on which improvement actually occurred. Rather, coverage should continue through the time it would have been reasonable for the physician, in consultation with the rehabilitation team, to have concluded that further improvement would not occur and to initiate the patient's discharge.

Since discharge planning is an integral part of any rehabilitation program and should begin upon the patient's admittance to the facility, an extended period of time for discharge action would not be reasonable after established goals have been reached, or a determination made that further progress is unlikely, or that care in a less intensive setting would be appropriate.

Attachment B

Research Articles for Policy Development on
Inpatient Rehabilitation Medical Review

Botney, Richard, Brett R. Stacey, Aaron M. Levine, Michael C. Munin, Thomas E. Rudy, Nancy W. Glynn, Lawrence S. Crossett, and Harry E. Rubash. "Rehabilitation After Hip and Knee Arthroplasty." JAMA 1998 280: 1402-1403.

Munin, Michael C., Thomas E. Rudy, Nancy W. Glynn, Lawrence S. Crossett, and Harry E. Rubash. "Early Inpatient Rehabilitation After Elective Hip and Knee Arthroplasty." JAMA 1998 279: 847-852. Munin's study is not exactly on point but it does suggest that early rehabilitation saves money and improves function faster.

Kramer, A.M., J.F. Steiner, R.E. Schlenker, T.B. Eilertsen, C.A. Hrincevich, D.A. Tropea, L.A. Ahmad, and D.G. Eckhoff. "Outcomes and costs after hip fracture and stroke. A comparison of rehabilitation settings." JAMA 1997 277: 396-404.

American Academy of Physical Medicine and American Medical Rehabilitation Providers Association bibliography on "Cost Benefit of Rehabilitation."

Duncan, P.W., R.D. Horner, D.M. Reker, G.P. Samsa, H. Hoenig, B. Hamilton, B.J. LaClair, and T. Dudley. "Adherence to postacute Rehabilitation Guidelines is Associated With Functional Recovery in Stroke." STROKE 2002; 33: 167-178.

Kong, K. et al. "Functional outcomes of patients on a rehabilitation unit after open heart surgery." J Cardiopulmonary Rehabil 1996; 16:413-418.

Sansone, G. et al. "Analysis of FIM instrument scores for patients admitted to an inpatient cardiac rehabilitation program." Arch Phys Med Rehabil 2002; 83: 506-512.

Stewart, D. et al. "Benefits of an inpatient pulmonary rehabilitation program: A prospective analysis." Arch Phys Med Rehabil 2001; 82: 347-352.

Votto, J et al. "Short stay comprehensive inpatient pulmonary rehabilitation for advanced chronic obstructive pulmonary disease." Arch Phys Med Rehabil 1996; 77: 1115-1118.

Lichtman, S. et al. "Long term follow-up of extended acute (Phase 1B) inpatient medical rehabilitation for patients with cardiac disease: A multi-center trial." In press.

Munin, M. et al. "Early inpatient rehabilitation after elective hip and knee arthroplasty." JAMA 1998; 279, No. 11: 847-852 (also referenced above).

Munin, M. et al. "Predicting discharge outcome after elective hip and knee arthroplasty." Am J Phys Med Rehabil 1995; 74, No. 4: 294-301.

Jha, A. et al. "Dissatisfaction with medical services among Medicare beneficiaries with disabilities." Arch Phys Med Rehabil 2002; 83: 1335-1341.

Clauser, Ph.D., Steven B. Clauserand Arlene S. Bierman, M.D. "M.S. Significance of Functional Status Data for Payment Quality." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003: Volume 24, Number 3.

Jette, Ph.D., Alan M., Stephen M. Haley, Ph.D., and Pengsheng Ni, M.P.H, M.D. "Comparison of Functional Status Used in Post-Acute Care." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003, Volume 24, Number 3.

Carter, Ph.D., Grace M., Daniel A. Relles, Ph.D., Gregory K. Ridgeway, Ph.D, and Carolyn M. Rimes, M.A. "Measuring Function for Medicare Inpatient Rehabilitation Payment." Health Care Financing Review, Conference Proceedings Measuring Functional Status, Spring 2003, Volume 24, Number 3.

Buchanan, Ph.D., Joan L., Patricia L. Andres, M.S., P.T., Stephen M. Haley, Ph.D., P.T., Susan M. Paddock, Ph.D., and Alan M. Zaslavsky, Ph.D. "An Assessment Tool Translation Study." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003, Volume 24, Number 3.

Iezzoni, M.D., M.Sc., Lisa I., and Marjorie S. Greenberg, M.A. "Capturing and Classifying Functional Status Information in Administrative Databases." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003, Volume 24, Number 3.

Bedirhan Somnath Chatterji, M.D., T., Nenad Kostansjek, M.Sc., and Jerome Bickenbach, Ph.D., L.L.B. "WHO's ICF and Functional Status Information in Health Records." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003, Volume 24, Number 3.

Harris, R.N., Ph.D., Marcelline R., Alexander P. Ruggieri, M.D., and Christopher G. Chute, M.D., Dr.P.H. "From Clinical Records to Regulatory Reporting: Formal Terminologies as Foundation." Health Care Financing Review, Conference Proceedings Measuring Functional Status Spring 2003, Volume 24, Number 3..