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FAX COVER SHEET

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DATE: 3-16-95

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MEMORANDUM

TO: Jennifer Kline
FROM: Steve Gleason
SUBJECT: Administrative Simplification Messages
DATE: March 16, 1995

Below, targeted to specific constituencies, are messages that I believe HRC can deliver at an event involving physicians, hospitals, and consumers. Bob Waters is working on bureaucracy flow charts that can be used to present the complicated patchwork for regulations affecting consumers and providers and would be addressed at a later time through the efforts of HRC and staff. With respect to immediate actions, these are my latest thoughts:

NEWS BYTE: WHITE HOUSE HELPS DOCTORS DECREASE PAPERWORK GIVING THEM MORE TIME FOR PATIENT CARE.

- *Announce immediate moratorium of HCFA rule requiring documentation for medical necessity on every lab test.*
- *Eliminate physician attestation requirement.*
- *Announce executive order to fiscal intermediaries that they can no longer ask for chart copies and additional paperwork unless they have cause to believe there is fraudulent claims activity.*

* **NEWS BYTE: HCFA VOWS TO PROTECT BENEFICIARIES BY ASSISTING IN THE REVIEW OF ALL THEIR MEDICAL BILLS. MEDICARE BENEFICIARIES WILL RECEIVE ONLY ONE MEDICAL BILL REGARDLESS OF THE NUMBER OF DOCTORS, HOSPITALS, AND INSURANCE COMPANIES INVOLVED IN THE CASE.**

- *Announce new HCFA policy which requires that future fiscal intermediary contracts provide coordination of benefits and unified statements to consumers. Intervention on behalf of consumers with providers and MediGap insurers would also be a provided service.*

In RFP requests for future contracts

pulled back

NEWS BYTE: WHITE HOUSE INTERVENES ON BEHALF OF HOSPITALS AND HEALTH CARE ORGANIZATIONS.

- *To prevent costly duplication, instruct the Department of Health and Human Service to accept private sector hospital audits in lieu of HCFA audits.*
- *Announce that the White House has instructed the Inspector General's office and Department of Health and Human Services to provide advisory opinions on new business arrangements in health care.*
- *Release a memo to the Director of the IRS advising the IRS to avoid using private settlements as a means to indirectly set national policy. Specifically clarify the general non-applicability of the Herman Hospital decision.*

NEWS BYTE: THE PRESIDENT INVITES CONGRESS TO APPOINT SIX MEMBERS TO A TWELVE-MEMBER INDEPENDENT AUDIT TEAM ON PAPERWORK REDUCTION AT HEALTH AND HUMAN SERVICES. THE TEAM WILL ACT AS A BI-PARTISAN GROUP THAT WILL REVIEW HHS OPERATIONS, REGULATIONS, AND EXPENSES.

- *The committee will be asked to review and recommend policies concerning the standardization of federal medicare payment policies, the reduction of claim form data requests, and the simplification of reimbursement claims processing, the development of methods to coordinate credentialing and utilization requirements for providers, the simplification of Clinical Laboratory Improvement Act reviews, the streamlining of the provider reimbursement review board opinions, the clarification of medicare fraud and abuse and anti-trust enforcement regulations, and methods of providing regulatory relief for managed care organizations.*

NEWS BYTE: WHITE HOUSE SECURES MEDICARE'S FUTURE WHILE ADDRESSING BUDGET DEFICIT.

- *HCFA announces that effective January 1, 1997 it will begin selling medicare coverage to individuals and businesses. The profits will offset deficits. Patients and businesses can choose to "buy medicare" or buy private insurance. HCFA feels benefits and premiums will be competitive.*

Other potential messages:

- ***Under the leadership of the First Lady, the Health Reform Task Force developed many of these important, but unheralded, concepts.***
- ***Efforts to study these issues further should be public, in concert with Congress, and designed in a manner similar to the base closing commission or Congressional ethics panels. (I would make the case that if you don't do something like this, you must announce specific cuts in regulations and personnel that cannot be easily unstaged. The public must view the White House as seriously interested and above reproach on the issue of administrative simplification and paperwork reduction. To do that, you either need to do something more extensive than the Congress or you have to invite a partnership with the Congress in a way that will make it difficult to say no.)***
- ***Unveil a plan to work with Congress in improving medicare reimbursement for small group (1-3 physician) practices and hospitals of less than 100 beds in order to cover unfunded regulatory mandates.***
- ***Ask Secretary of Health and Human Services to require that all insurers with federal contracts, grants, or awards use standard medicare claims forms.***

Please review and call me. I can supply additional detail as needed. Thank you.

Bruce Yarwood

February 17, 1995

Dear Jennifer:

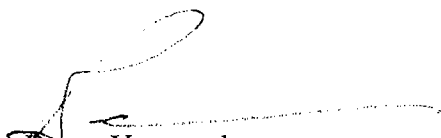
Just a note to say thanks for meeting with Paul, Dave and myself. We thought the meeting went very well. You seemed to be interested in our information, and very willing to want to help. We look forward to the next step.

I sure would appreciate some feedback in the next week or so as to what is happening. It is very important to our members back home.

In the meantime, enjoy reading the two things we said we would send to you - the letter from Bruce Vladek to Ben Cardin and the ABT study.

Look forward to hearing from you.

Sincerely,



Bruce Yarwood



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care Financing Administration

The Administrator
Washington, D.C. 20201

JAN 11 1995

The Honorable Benjamin L. Cardin
House of Representatives
Washington, D.C. 20515-2003

Dear Ben:

Thank you for your letter requesting that the Health Care Financing Administration (HCFA) move forward in developing a demonstration to test the effect of using nursing homes to provide subacute care to Medicare beneficiaries. I share your regret that health care reform legislation was not enacted during this recent session of Congress.

As discussed in our meeting earlier this year, we have seen increasing market competition for services that are labeled subacute care by the nursing home industry. It is being argued that many individuals currently served by hospitals could be more effectively and efficiently served in other settings. Some private insurers, especially managed care programs, are looking to these subacute providers as a possible way to reduce the utilization of high cost hospital services without reducing the level or quality of care.

However, there are little data available regarding subacute care and its potential impact on quality and costs of public and private health insurance programs. The Assistant Secretary for Planning and Evaluation is currently conducting a small study to learn more about this area and is finding very little in the way of subacute research studies. While the Abt study is the best available research, we have some concerns with their conclusions. (The potential \$7 billion in Medicare savings is based on recomputing the Medicare hospital prospective payment system to allow for shortened hospital stays for 57 of the 62 diagnosis related groups included in the study. Also, the subacute or nursing home industry would need the capacity to provide an additional 19.8 million days of care. In 1990, the total Medicare-covered skilled nursing facility days were only 21.2 million.) HCFA currently is following up on the Abt study using a recently-available administrative data base that links post acute care to all short stay hospital discharges over a 5-month period. We should have the results of this study within the next 6 months.

I continue to support a subacute demonstration project which would not only look at the cost implications but the quality implications as well. Considering the frailty and medical needs of the individuals that could benefit from subacute care, the issue of

Page 2 - The Honorable Benjamin L. Cardin

quality is of utmost importance. HCFA plans to continue to develop the necessary information that could lead to the development of a subacute demonstration. I would like to continue working with you and your staff in the next session of Congress to learn all we can about the potential of subacute care.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce C. Vladeck". The signature is stylized with a large initial "B" and a long horizontal stroke.

Bruce C. Vladeck
Administrator

**Subacute Care in
Freestanding Skilled
Nursing Facilities:**

**An Estimate of Savings
to Medicare**

June 1994

Submitted to:

American Health Care Association
1201 L Street, N.W.
Washington, DC 20005

Prepared by:

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*Subacute Care in Freestanding Skilled Nursing Facilities:
An Estimate of Savings to Medicare*

INTRODUCTION

Although the term "subacute care" is often used in discussions of the American health care system, to this point there has been no generally agreed-upon definition of what this care constitutes. Without a clear definition, it is not possible to estimate either the extent to which subacute care is currently provided or the extent to which it can be provided in alternative settings. This makes it difficult to evaluate government policy toward subacute care and impossible to conduct cost-benefit analyses of subacute care that is provided in alternative settings.

The American Health Care Association (AHCA) has defined a subacute program as:

A comprehensive inpatient program for the individual who has had an acute event as a result of an illness, injury, or exacerbation of a disease process; has a determined course of treatments; and does not require intensive diagnostic and/or invasive procedures. The severity of the individual's condition requires an outcome-focused interdisciplinary approach utilizing a professional team to deliver complex clinical interventions (medical and/or rehabilitation). These highly specialized programs promote quality care through efficient and effective utilization of healthcare resources.

Although this definition provides clinical guidance in defining subacute care, it does not directly provide the data on utilization, costs, and payments which are necessary to conduct a cost-benefit analysis of alternative government policies toward subacute care. To collect this information, we have used available data on Diagnosis Related Groups (DRGs) that are currently used by the federal Medicare program to establish hospital Medicare payments. These data can be combined with clinical judgment to estimate the potential benefit of using an alternative

setting, such as properly staffed and equipped freestanding Skilled Nursing Facilities (SNFs), to provide subacute care.¹

For each DRG considered, a group of clinicians (listed in Appendix A) estimated the share of current hospital patients within the DRG who could receive subacute care at a properly staffed and equipped freestanding SNF.² This clinical panel also estimated the number of days patients would need to spend in a hospital before they could be transferred to a subacute SNF.³ The panel assumed that a patient's combined length of stay in a hospital and freestanding subacute SNF would be the same as the current length of stay in a hospital. In forming their estimates, panel members were asked to be very conservative.

The members of the clinical panel had a great deal of difficulty thinking in terms of patients identified only by DRGs. While the panel members clearly recognized: (1) that all of the available data were expressed in terms of DRGs, (2) that Medicare payment policy was designed around DRGs, and (3) that, therefore, the cost-benefit analysis was, of necessity, restricted to a framework of primary DRGs, they were very uncomfortable with any movement away from consideration of the procedures and services needed by individual patients. In other words, the panel members felt that an episode of care is more dependent on patient severity,

¹ The clinician panel specifically assumed that subacute SNFs would have 24-hour RN coverage, sufficiently high nurse staffing ratios to effectively meet the clinical needs of the specific population being served, central and peripheral IV lines available; laboratory, pharmacy, and X-ray available 7 days a week, 24 hours a day with short turnaround time; and other ancillary services to meet patient needs (e.g., respiratory therapists for ventilator patients). In addition, the clinical panel assumed that these facilities would have continuous physician coverage (at least on an "on call" basis), access to specialty physicians, and an actively involved Medical Director. The clinical panel also assumed that physical, occupational, and speech therapy services would be offered on site at least six days a week.

² Since there were no empirical data to guide the deliberations of the panel (other than its expert judgment), the panel felt that, to avoid false precision in estimating the share of hospital patients in a given DRG who could be treated in a subacute SNF, it would use five categories to define this share. These categories (and their attendant percentages) are as follows: none (0 percent), few (20 percent), about half (50 percent), most (80 percent), and nearly all (90 percent).

³ For the remainder of the report, all references to "subacute SNF" are implied to mean "freestanding subacute SNF". Reference to any other type of SNF will be clearly designated.

clinical decision making, and treatment management than it is on diagnosis. This was particularly a concern since most patients are associated with multiple diagnoses and are faced with multiple levels of appropriate care that depend on many clinical factors other than the patient's DRG.⁴

In spite of these concerns, the clinical panel members provided the project with their best estimates for each of the needed data elements. A great deal of compromise was necessary in each situation in order to arrive at the figures used in this report, and, in the end, the good will and hard work of the panel members produced results that have enabled the cost-benefit analysis to proceed. In any event, we feel that estimates of the scope of subacute care and the potential Medicare savings from shifting the setting of care and modifying the payment policy are sufficiently precise for policy makers. Nevertheless, the clinical panel members insist that, while payment decisions may continue to be governed by DRG assignments and cost-benefit savings calculated from DRG-based data and patient categorizations, clinical decisions regarding the type of treatment, setting of treatment, and length of stay in each setting continue to be made on the basis of a host of factors in addition to the billing DRG.

To provide a definition of subacute care that could be used for the cost-benefit analysis in this report, the panel identified a total of 62 DRGs that included patients who could potentially be treated in SNFs offering subacute care. The selection of the 62 DRGs, however, is only meant to provide a working definition of subacute care so that DRG-level data could be used for the cost-benefit analysis presented in this report. This is not an all-inclusive list, as there are potentially subacute patients in other DRGs. The list of DRGs in the working definition is subject to subsequent modification and is not meant to serve as a clinical definition of subacute care.

⁴ In fact, many of the clinical panel members took issue with the AHCA definition to the extent that it defines a subacute care program as one that, among other things, "does not require intensive diagnostic and/or invasive procedures" without identifying a specific set of services required by subacute patients. Their point is well taken, but the program definition in question was previously developed by a special task force of AHCA members, with approval by the AHCA Board of Directors, and it is not within the auspices of this cost-benefit study to alter or modify the AHCA clinical subacute program definition.

It follows, therefore, that the cost-benefit analysis will only provide a "ballpark" estimate of the maximum potential savings to the Medicare program of treating subacute patients in a freestanding subacute SNF. Given these caveats, the conservative approach used in the analysis has generated estimates that are suggestive of considerable savings to the Medicare program under a number of assumptions.

The analysis in this report focuses on the potential to replace all or part of current hospital stays with subacute care in SNFs for some of the patients in these 62 DRGs. It further considers only stays that are covered by Medicare. Although this excludes other patients who could receive subacute care (e.g., private pay patients), the focus on Medicare patients is dictated by the available data and the desire to measure the potential budgetary impact to the Federal government of different policy changes in the Medicare program.

Our analysis uses estimates of the costs of serving patients in freestanding subacute SNFs from the point in the hospital stay at which it is clinically appropriate for the patient to be treated at a freestanding subacute SNF.⁵ The analysis also uses estimates of hospital costs for the hospital stay. These costs included services such as hospital room and board, nursing services, rehabilitation therapies, patient education, patient monitoring, drug administration, and routine ancillaries that are provided in both settings. Given estimates of costs in each setting, the report estimates the potential savings that Medicare could realize by changing its payment policies if hospital patients were placed in freestanding SNFs that could provide subacute care at a lower cost for all, or part, of what is now the hospital stay.

It should be emphasized that this analysis estimates the maximum potential savings to Medicare assuming that the only alternative to the hospital stay is a freestanding subacute SNF stay. Clearly, there are more subacute alternatives than this, but the objective of the analysis is not to estimate what the actual distribution of subacute placements is likely to be at some point

⁵ In reviewing DRGs for inclusion in the cost-benefit analysis, the panel considered only those DRGs in which patients would spend at least two days in a subacute SNF. This eliminated some DRGs in which patients would have spent only one or two days in a subacute SNF.

in the future. Rather, the objective is to provide a maximum estimate of the potential of the freestanding subacute SNF alternative.

For five of the DRGs considered in this report, the clinicians determined that it would be clinically appropriate for some patients to completely bypass a hospital stay by directly entering a SNF that offered subacute care. For these patients, Medicare could immediately realize savings if it selectively waived the current requirement that these patients first be hospitalized for three days.

For the remaining 57 DRGs considered in this report, the clinical panel concluded that some hospitalization would be required. Under current Medicare payment policy, transfer to a subacute SNF setting increases Medicare payments because full payment is made to the hospital whether or not the patient is transferred. If the patient is transferred to a SNF that provides subacute care, Medicare currently must make payments to the SNF in addition to the full payment already made to the hospital.

Medicare can only realize savings for patients in DRGs requiring some hospitalization if hospital DRG payments can be rebased to reflect differences in costs between hospitals and subacute SNFs. For these DRGs, there will be savings if Medicare payment can be made to subacute SNFs that reflect their lower cost of serving patients once the necessary part of the hospital stay has been completed. For Medicare to realize these savings, however, it would be necessary to directly apportion the hospital DRG payment between hospitals and subacute SNFs based on their respective costs.

One important cost associated with transferring hospital patients to subacute SNFs is that empty hospital beds will be created in the process. It is important to realize that if hospital beds are expected to remain empty, many of the costs of maintaining the hospital bed (e.g., staffing) can be avoided. The true, long run, costs of an empty hospital bed are fixed costs such as interest and depreciation that cannot be reduced as occupancy drops. Fixed costs represented about nine percent of total hospital expenses in 1991, or about \$70 per day per hospital bed.

This dollar figure is consistent with estimates from several economic studies (discussed in Appendix C) for permanently empty, and hence not staffed, beds.⁶

To place the long-term costs of empty hospital beds into context, it is necessary to subtract these costs from the savings that the Medicare program could realize by treating patients in subacute SNFs. Across all 62 DRGs, we have estimated that Medicare could have reduced its payments by a maximum of \$8.906 billion in 1991 with appropriate changes in its payment policy (see below). This averages approximately \$455 per patient day for each of the 19.6 million days for which it would have been clinically appropriate for patients to be treated in subacute SNFs. Even if Medicare were to compensate hospitals at the rate of \$70 per day for the cost of each empty bed, it could still realize savings of \$385 per patient day or about \$7.535 billion in total annual payments.

SUMMARY OF RESULTS

In reviewing potential savings to Medicare of treating subacute care patients in SNFs, we have considered patients in three different groupings of DRGs that were identified by clinicians according to the number of hospital days of care that would be required before transfer to a subacute SNF.

- Five DRGs require no hospitalization. During 1991, subacute SNFs could potentially have provided 1.0 million days of care to 159,000 Medicare patients in these DRGs. If the three-day rule were selectively waived for these DRGs and all of these patients bypassed hospitals completely, Medicare could have realized savings of \$519 million without paying for the empty hospital beds created and \$446 million if Medicare pays for long-term costs of the empty hospital beds. If the three-day rule were retained, it would be necessary to rebase payments and/or divide them between hospitals (for the three-day period) and subacute SNFs (for the remainder of the stay) to realize a savings. In this case, the savings with rebasing would be \$217 million if the unoccupied hospital beds were not paid for and \$178 million if Medicare paid for the empty hospital beds.

⁶ In the short run, hospitals may also incur operating costs of maintaining an empty bed on a "standby" basis. These costs are discussed in Appendix D.

- Four DRGs require only two days of hospitalization before a patient is moved to a subacute SNF. In 1991, subacute SNFs could have potentially provided 2.4 million days of care for 390,000 Medicare patients in these DRGs. If the three-day rule were selectively waived for these DRGs and rebasing of the DRG payments effected, Medicare savings of \$1.089 billion could have been realized without paying for empty hospital beds and \$920 million if Medicare paid for empty beds. If the three-day rule were retained, the potential Medicare savings would fall to \$871 million and \$729 million, respectively, as patients would be required to spend a third day in the more costly hospital setting.
- Fifty-three DRGs require three or more days of hospitalization. Subacute SNFs could potentially have provided 16.1 million days of care for 2.3 million Medicare patients in these DRGs in 1991. Patients in these DRGs are not affected by the requirement that patients spend at least three days in a hospital. Potential Medicare savings would have been \$7.298 billion in 1991 if the costs of empty hospital beds were not compensated by Medicare and \$6.169 billion if Medicare continued to pay for empty hospital beds, assuming that current Medicare DRG payments were rebased and/or otherwise apportioned between hospitals and subacute SNFs.

In total, 62 DRGs were identified as those most likely to contain candidates for subacute care in freestanding SNFs. Further, it is estimated that subacute SNFs could have provided up to 19.6 million days of treatment to 2.9 million hospital patients in 1991. Total Medicare hospital payments for these patients were \$31.982 billion in 1991. The maximum potential 1991 savings to Medicare from treating all of these patients in a subacute SNF setting and rebasing DRG payments so that payments can be apportioned appropriately between hospitals and subacute SNFs amounts to: (1) \$8.906 billion with selective removal of the three-day rule, but without paying for the empty hospital beds; (2) \$8.386 billion with retention of the three-day rule, but without paying for the long-term costs of empty hospital beds; (3) \$7.535 billion if the three-day rule is selectively waived, but the costs of the empty hospital beds are fully compensated; and (4) \$7.076 billion if the three-day rule is retained and Medicare pays for the empty hospital beds.

The remainder of the report reviews the general methodology and discusses the three groupings of DRGs defined in terms of the number of days of hospitalization required. For each type of DRG, summary data on costs and utilization are presented, along with a sample

calculation of potential savings to the Medicare program. The final section of the report presents a summary of the study conclusions.

The report also has five appendices. The first lists the names and affiliations of the panel members who provided the clinical input used in this report. Appendix B provides data for each of the 62 DRGs used in this report and includes calculations of potential savings to the Medicare program for each DRG under different payment policies. Appendix C summarizes several economic studies that measure the long-term costs of an empty hospital bed, and includes a calculation of these costs using recent financial data from hospitals. Appendix D presents estimates of savings to the Medicare program assuming that Medicare would reimburse hospitals for the operating costs of maintaining a hospital bed on a standby basis. Appendix E discusses the capital costs to freestanding SNFs of providing subacute care.

METHODOLOGY AND RESULTS

The computation of potential savings to the Medicare program requires estimation of hospital costs for the time that a patient could be treated in a subacute SNF. Medicare does not collect hospital data for each day of a patient's hospital stay but rather collects data on the total payment (cost) of a hospital stay. To generate estimates on a daily basis, we allocated total hospital payments across each day of a patient's hospital stay by estimating what it would cost a hospital to provide these services. To make these allocations, we first subtracted out an estimate of \$600 per day for basic items such as hospital room and board, administration and housekeeping charges. We then allocated the remaining "patient treatment" costs across each day of hospital stay by estimating what services hospitals provided for each day of the patient's stay. Our allocations typically served to "load" costs into the first few days of a patient's stay,

because surgery and diagnostic tests are performed during this time.⁷ The allocation of hospital costs by day of stay for each DRG is presented in Appendix B.

Given the allocation of hospital costs on a per-day basis, it was possible to compute per-case savings within the DRG by comparing these costs to estimated per-day nursing home charges and summing over the length of stay in a nursing home. Nursing home charges were obtained in consultation with subacute SNF operators who currently provide subacute care; they estimated what they would charge to cover their costs for providing subacute care to patients for each DRG considered.⁸ The total savings to the Medicare program within a DRG were obtained by multiplying per-case savings by the total number of cases that had been identified by clinicians as treatable in subacute SNFs. The data used on Medicare hospital discharges and payments were from the 1991 MEDPAR file, the data set developed by the Health Care Financing Administration that covers all Medicare hospital inpatient claims.

The remainder of this section presents the methodology for computing total savings for different types of DRGs and, where applicable, estimating the cost of the three-day rule. A sample calculation is given for each type of DRG, defined in terms of the time a hospital patient could be transferred to a subacute SNF. For each type of DRG, there is a separate listing of the DRGs included in the analysis, along with information for each DRG on:

- The 1991 number of Medicare discharges, current hospital payments, and current average hospital length of stay;
- The share of patient days that could have been spent in subacute SNFs;

⁷ Our assumption that daily hospital charges decline over the patient's stay is consistent with research that has shown that hospital costs decline over a patient's stay for a range of DRGs for Medicare patients. See, for example, How Services and Costs Vary by Day of Stay for Medicare Hospital Stays, Grace Carter and Glenn Melnick, Prospective Payment Commission, 1990.

⁸ Our assumption in estimating SNF charges is that the nursing facility provides its own spoke services such as pharmacy services and avoids the higher markups that would come from purchasing their services from other sources.

- The length of stay in the hospital and the subacute SNF, assuming that the sum of the two equals the current hospital length of stay.
- The average daily SNF charges to treat a subacute patient in the DRG.

The details of calculations of potential savings to the Medicare program for each DRG are presented in Appendix B. For those DRGs affected by the three-day rule, calculations are made with and without the three-day rule in effect.

DRGs Requiring No Hospitalization

The clinical panels identified five DRGs in which some patients could be treated entirely in subacute SNFs without any hospitalization. Table 1 provides summary information on these DRGs. If the requirement that patients spend three days in a hospital before being treated in a subacute SNF were waived, these patients could bypass hospitals completely and Medicare could realize immediate savings. Computation of these three-day-rule savings are provided in Appendix B along with computation of rebasing savings Medicare could realize.

If we assume that the three-day rule is not in effect, the per-case savings (denoted 3-Day_Savings_i) to Medicare for treating DRG number *i* in subacute SNFs can be written as:

$$(1) \quad 3\text{-Day_Savings}_i = \text{Tot_Hosp_Chrg}_i - \text{Tot_SNF_Chrg}_i$$

where Tot_Hosp_Chrg_i is the total current hospital payment for the DRG and Tot_SNF_Chrg_i is what a SNF would charge for treating a subacute patient in the DRG.

Total hospital current payments for the DRG were obtained from Medicare data. If we assume that subacute SNF charges are constant for each day of a patient's stay, then total subacute SNF charges can be determined by multiplying the length of a patient's stay in a subacute SNF by the charge per day for the DRG (both available in Table 1). We can write total subacute SNF charges for DRG *i* as:

Table 1: Subacute DRGs That Are Treatable in Nursing Homes - No Hospitalization Required

DRG Code	DRG Description	Medicare Discharges	Current Hospital Medicare Payment	Potential SNF Share	Current Hospital Days	Potential Hospital Days	Potential NH Days	Daily NH Charge
238	Osteomyelitis	6,381	\$11,464	80%	14.84	0	14.84	\$350
243	Medical back problems	117,272	\$4,759	50%	7.19	0	7.19	\$250
254	Fx sprn strn & disl of uparm lowleg ex foot age >17 w/o cc	14,324	\$3,483	80%	5.82	0	5.82	\$250
271	Skin ulcers	20,018	\$9,602	80%	14.58	0	14.58	\$250
410	Chemotherapy w/o acute leukemia as secondary diagnosis	136,216	\$4,121	50%	3.62	0	3.62	\$350

$$(2) \quad Tot_SNF_Chrg_i = SNF_Days_i * SNF_Chrg_Day_i$$

where SNF_Days_i is the number of days that a patient could spend in a nursing home and $SNF_Chrg_Day_i$ is the (constant) charge per day for treatment in the nursing home.

An example of a DRG in which a patient could bypass a hospital and be treated only in a subacute SNF is DRG 243 (medical back problems) which represented 117,272 Medicare discharges in FY 1991 with a Medicare hospital payment of \$4,759 per case. Current hospital length of stay for this DRG is 7.19 days, all of which could be spent in a subacute SNF ($SNF_Days_{243} = 7.19$ days). Subacute SNFs would charge Medicare \$250 per day for treating these patients ($SNF_Chrg_Day_{243} = \$250/day$). Using expression (2), the total per-case charge for treatment in a subacute SNF would be:

$$(3) \quad Tot_SNF_Chrg_{243} = 7.19 \text{ days} * \$250/day = \$1,797 \text{ per case}$$

The per-case savings to Medicare of treating a patient with medical back problems entirely in a subacute SNF rather than a hospital is, from expression (1), the difference between total hospital charges and subacute SNF charges per case:

$$(4) \quad 3\text{-Day-Savings}_{243} = \$4,759 - \$1,797 = \$2,962 \text{ per case}$$

To compute the total number of cases which could be treated in subacute SNFs, it is necessary to compute:

$$(5) \quad N_i = N_{iT} * Share_i$$

where N_i is the total number of hospital patients in DRG i who can be served in a nursing home, N_{iT} the total number of Medicare patients in DRG i , and $Share_i$ the share of hospital patients in DRG i who can be moved to a subacute SNF.

The total potential three-day rule savings to Medicare of placing patients in these DRGs in a subacute SNF will be:

$$(6) \quad Tot_3\text{-Day_Savings}_i = N_i * 3\text{-Day_Savings}_i$$

For DRG 243 (where $\text{Share}_i = 50\%$), these savings will be:

$$(7) \quad \text{Tot_3-Day_Savings}_{243} = 50\% * 117,272 \text{ cases} * \$2,962/\text{case} = \$173 \text{ million}$$

The total potential savings to Medicare of treating all patients who could bypass the hospital in a subacute SNF are (without the three-day rule) \$173 million. These savings are, however, reduced if patients in these DRGs are required to stay in a hospital for three days before being transferred to a nursing home for the remainder of their stay. To obtain these savings, Medicare would need to rebase payments and allocate them between different types of facilities.

To compute the Medicare reimbursements for these DRGs under a three-day rule with rebasing, it is necessary to separately compute hospital charges for the first three days of a patient's stay ($\text{Hospchrg}_{i(1-3)}$) in DRG i , and then compute these charges on a daily basis for Day 4 and onward of a patient's at a subacute SNF. The subacute SNF charges are the product of SNF_Days_i , the number of days that a patient spends in the SNF, and SNF_Chrg_Day_i , the (constant) charge per day for subacute treatment in a SNF.

If we denote the current average length of stay in the hospital for patients in DRG i as LOS_i , then the number of days that a patient spends in the subacute SNF can be written as:

$$(8) \quad \text{SNF_Days}_i = \text{LOS}_i - 3$$

If the patient were to stay for three days in a hospital and then receive the remaining days of treatment in a subacute SNF, the total charges to Medicare would be:

$$(9) \quad \text{Tot_Chrg}_i = \text{Hospchrg}_{i(1-3)} + \text{Tot_SNF_Chrg}_{i(4+)}$$

which is the sum of hospital charges for days one through three of treatment ($\text{Hospchrg}_{i(1-3)}$) at a hospital and total subacute SNF charges beginning in day four of the patient's treatment ($\text{Tot_SNF_Chrg}_{i(4+)}$).

The potential savings to the Medicare program of treating patients in subacute SNFs while maintaining the three-day stay requirements will be the difference between what a hospital would charge for day four and onward and what a subacute SNF would charge for this time. These savings can only be realized with rebasing and division of payment between facilities.

For the example of DRG 243 (medical back problems), we have estimated hospital charges for the first three days of a hospital stay [**Hospchrg**₂₄₃₍₁₋₃₎] as \$1,994.⁹ Subacute SNFs would charge Medicare for 4.19 days of care (on average) at the rate of \$250 per day or a \$1,048 per case for the remaining days of a patient's care. The combined cost of a stay divided between a hospital and a subacute SNF would therefore be \$1,994 plus \$1,048 or \$3,042 per case. The rebasing savings (**Rebasing_Savings_i**) are therefore \$1,717 per case relative to the current hospital payment of \$4,759 per case. The total rebasing savings for this DRG are equal to:

$$(10) \quad \text{Tot_Rebasing_Savings}_i = N_i * \text{Rebasing_Savings}_i$$

$$\text{or } 50 \text{ percent} * 117,272 \text{ cases} * \$1,717/\text{case} = \$100 \text{ million.}$$

For the five DRGs considered in this section, the Medicare program could, through selective waiver of the three-day rule, realize savings of \$519 million. Without a waiver of the three-day rule, Medicare could potentially realize savings of \$217 million, though it would be necessary to rebase these DRGs and to divide payment between hospitals and subacute SNFs.

Hospitalization of More than Three Days Required

The 53 DRGs in this section represent the majority of DRGs considered, namely those which clinicians believe require at least three days of hospitalization before being transferred to a subacute SNF. Table 2 provides summary information on these DRGs which covered 2.3 million Medicare discharges in FY 1991. Appendix B provides the more detailed data used in the cost calculations.

⁹ These data are given in Appendix B.

Table 2: Subacute DRGs That Are Treatable in Nursing Homes - Required Hospital Stay of Three Days or More

DRG Code	DRG Description	Medicare Discharges	Current Hospital Medicare Payment	Potential SNF Share	Current Hospital Days	Potential Hospital Days	Potential NH Days	Daily NH Charge
001	Craniotomy age >17 except for trauma	28,983	\$27,166	50%	18.35	10	8.35	\$350
012	Degenerative nervous system disorders	37,239	\$12,416	80%	18.51	4	14.51	\$300
014	Specific cerebrovascular disorders except TIA	340,796	\$9,051	50%	11.12	6	5.12	\$375
075	Major chest procedures	30,824	\$21,629	50%	14.17	10	4.17	\$350
076	Other respiratory system O.R. procedures w cc	38,077	\$16,987	50%	15.04	10	5.04	\$300
079	Respiratory infections & inflammations age >17 w cc	127,271	\$12,125	80%	12.38	4	8.38	\$300
085	Pleural effusion w cc	17,025	\$7,997	50%	9.11	4	5.11	\$250
088	Chronic obstructive pulmonary disease	138,112	\$7,019	80%	7.94	4	3.94	\$400
089	Simple pneumonia & pleurisy age >17 w cc	390,002	\$7,747	50%	9.02	4	5.02	\$300
090	Simple pneumonia & pleurisy age >17 w/o cc	55,522	\$4,792	80%	6.71	3	3.71	\$300
104	Cardiac valve procedure w pump & w cardiac cath	15,599	\$63,505	50%	22.69	14	8.69	\$300
105	Cardiac valve procedure w pump & w/o cardiac cath	14,675	\$50,109	50%	16.70	10	6.70	\$300
106	Coronary bypass w cardiac cath	57,824	\$40,092	50%	15.89	7	8.89	\$300
107	Coronary bypass w/o cardiac cath	43,852	\$32,143	50%	12.26	6	6.26	\$300
113	Amputation for circ system disorders except upper limb & toe	33,927	\$17,875	80%	18.47	5	13.47	\$350
121	Circulatory disorders w AML & c.v. comp disch alive	133,417	\$11,131	20%	10.06	5	5.06	\$300
126	Acute & subacute endocarditis	3,951	\$20,546	80%	22.03	7	15.03	\$400
127	Heart failure & shock	575,993	\$7,042	50%	7.98	3	4.98	\$300
128	Deep vein thrombophlebitis	25,452	\$5,306	80%	8.60	3	5.60	\$300
130	Peripheral vascular disorders w cc	67,892	\$6,511	80%	8.41	3	5.41	\$300
148	Major small & large bowel procedures w cc	137,277	\$23,377	50%	16.97	9	7.97	\$325
150	Peritoneal adhesiolysis w cc	20,843	\$18,029	50%	14.23	7	7.23	\$300
154	Stomach esophageal & duodenal procedures age >17 w cc	39,942	\$30,888	50%	19.34	10	9.34	\$700
170	Other digestive system O.R. procedures w cc	12,622	\$20,713	50%	16.88	12	4.88	\$350
172	Digestive malignancy w cc	32,119	\$9,021	80%	10.76	6	4.76	\$300
195	Total cholecystectomy w C.D.E. w cc	19,766	\$15,442	50%	12.61	7	5.61	\$300
197	Cholecystectomy w/o C.D.E. w cc	69,180	\$11,353	50%	9.38	5	4.38	\$300
199	Hepatobiliary diagnostic procedure for malignancy	2,942	\$17,116	20%	15.53	7	8.53	\$300
205	Disorders of liver except malig cirr alc hepa w cc	21,011	\$8,867	20%	9.54	7	2.54	\$300
209	Major joint & limb reattachment procedures of lower extremity	247,763	\$16,199	90%	11.35	3	8.35	\$350
210	Hip & femur procedures except major joint age >17 w cc	109,312	\$13,980	90%	14.04	6	8.04	\$300
211	Hip & femur procedures except major joint age >17 w/o cc	32,548	\$9,418	90%	10.76	3	7.76	\$300
213	Amputation for musculoskeletal system & conn tiss disorders	5,677	\$13,126	80%	13.44	7	6.44	\$350
214	Back & neck procedures w cc	37,293	\$14,015	80%	11.51	8	3.51	\$300
217	WND debrid & skin graft except hand for muscskelet & con tiss dis	15,786	\$23,867	80%	22.74	10	12.74	\$300
235	Fractures of femur	7,427	\$9,021	80%	14.61	4	10.61	\$300
236	Fractures of hip & pelvis	48,731	\$7,744	80%	12.09	3	9.09	\$300
263	Skin graft &/or debrid for skin ulcer or cellulitis w cc	26,265	\$19,547	80%	22.44	7	15.44	\$250
264	Skin graft &/or debrid for skin ulcer or cellulitis w/o cc	4,741	\$9,370	80%	12.20	5	7.20	\$250
277	Cellulitis age >17 w cc	66,401	\$6,470	50%	8.81	5	3.81	\$350
285	Amputation of lower limb for endocrine nutrit & metabol disorders	4,324	\$19,973	80%	21.36	10	11.36	\$375
287	Skin graft & wound debrid for endoc nutrit & metabol disorders	6,072	\$17,009	80%	20.65	10	10.65	\$400
294	Diabetes age >35	93,133	\$5,425	50%	7.59	3	4.59	\$300
320	Kidney & urinary tract infections age >17 w cc	155,650	\$7,061	80%	8.81	3	5.81	\$300
331	Other kidney & urinary tract diagnoses age >17 w cc	28,333	\$7,150	20%	7.68	5	2.68	\$300
403	Lymphoma & non-acute leukemia w cc	27,380	\$11,579	20%	12.08	7	5.08	\$300
413	Other myeloprolif dis or poorly diff neopl diag w cc	10,331	\$9,178	20%	11.18	7	4.18	\$350
416	Septicemia age >17	126,072	\$10,739	80%	10.79	4	6.79	\$300
439	Skin grafts for injuries	1,041	\$12,545	80%	11.78	7	4.78	\$350
462	Rehabilitation	112,550	\$15,630	80%	21.72	3	18.72	\$350
468	Extensive O.R. procedure unrelated to principal diagnosis	76,095	\$24,464	20%	19.70	8	11.70	\$350
471	Bilateral or multiple major joint procs of lower extremity	6,218	\$27,805	90%	15.93	6	9.93	\$400
475	Respiratory system diagnosis with ventilator support	77,006	\$25,250	50%	14.53	9	5.53	\$400

For these DRGs, Medicare could realize savings if it were able to move patients at the clinically appropriate time to subacute SNFs, where daily charges are less than those charged by hospitals. This would require that these DRGs be rebased and that separate reimbursement be provided to both the hospital and subacute SNFs. Since the DRGs in this section require at least three days of hospitalization, the DRGs are not affected by the three-day rule.

To estimate the potential savings to Medicare for these DRGs, it is necessary to first estimate charges up to the time that a patient can be moved to a subacute SNF. These charges can then be subtracted from total hospital payments to determine the additional hospital charges incurred if the patient were to remain at the hospital.

If we denote the number of days a patient stays at a hospital before moving to a subacute SNF as **D**, then total hospital charges for days 1 through **D** in DRG **i** will be $Hospchg_{i(1-D)}$. The remaining hospital charges $Hospchg_{i(D+1-LOS_i)}$ are measured from day **D+1** to day LOS_i (the current average length of hospital stay for this DRG) and are equal to:

$$(11) \quad Hospchg_{i(D+1-LOS_i)} = Tot_Hosp_Chrg_i - Hospchg_{i(1-D)}$$

Expression (11) measures what a hospital would charge from the time that a patient could be moved to a nursing home (i.e., from day **D** onward). These charges must be compared to what a nursing home would charge for treating the patient from day **D+1** to the end of the patient's stay. If we denote the current average length of stay in the hospital for patients in DRG **i** as LOS_i , then the number of days that a patient spends in the nursing home can be written as:

$$(12) \quad SNF_Days_i = LOS_i - D$$

As an example, Medicare patients with chronic pulmonary disease (DRG 88) currently spend 7.94 days in the hospital at an average total charge per discharge of \$7,019. There were 138,112 Medicare discharges for DRG 88 in FY 1991, an estimated 80 percent of these patients could be moved to a subacute SNF at the end of their fourth day of hospitalization. While at

the subacute SNF, these patients would spend 3.94 days at a charge of \$400 per day before discharge.

Given this estimate of the number of days in the nursing home, the per-case charges for the nursing home portion of treatment for the DRG can be estimated as:

$$(13) \quad \text{Tot_SNF_Chrg}_{88} = \text{SNF_Days}_{88} * \text{SNF_Chrg_Day}_{88}$$

or 3.94 days times \$400/day or \$1,576 per case.

The per-case savings to Medicare of moving a patient to a subacute SNF at the point when it is medically appropriate is the difference between what a hospital and a subacute SNF would charge from the time that the patient could be moved until the end of the patient's stay. This savings is the difference between expressions (11) and (13) or:

$$(14) \quad \text{Rebasing_Savings}_i = \text{Hospchrg}_{i(D+1 - \text{LOS}_i)} - \text{Tot_Nurs_Chrg}_i$$

We are assuming that hospitals would charge Medicare \$3,473 [$\text{Hospchrg}_{88(1-D)}$] in the four days before a patient could be moved to a subacute SNF.¹⁰ If the patient were to remain in the hospital, subsequent hospital charges would be \$3,546 ($\text{Hospchrg}_{88(D+1 - \text{LOS})}$). From expression (14), the potential per-case savings to Medicare of moving these patients to nursing homes would be the difference between what a hospital and nursing home would charge for the last 3.94 days of a patient's treatment:

$$(15) \quad \text{Rebasing_Savings}_{88} = \$3,546 - \$1,576 = \$1,970 \text{ per case}$$

The clinical panel estimated that 80 percent of the 138,112 cases in this DRG could potentially be treated in subacute SNFs. The potential total savings for patients in this DRG would be:

$$(16) \quad \text{Tot_Rebasing_Savings}_{88} = 80\% * 138,112 \text{ cases} * \$1,970/\text{case}$$

¹⁰ These data are provided in Appendix B.

or \$218 million.

For the 53 DRGs considered in this section, the Medicare program could potentially realize savings of \$7.298 billion. To realize these savings, it would be necessary to rebase these DRGS and apportion payment between hospitals and subacute SNFs.

Hospitalization of Less Than Three Days Required

The four DRGs discussed in this section require two days of hospitalization before a patient can be moved to a subacute SNF. They are therefore affected by the three-day rule. Even with a selective waiver of the three-day rule, it would be necessary for Medicare to rebase these DRGs and to apportion payment between hospitals and subacute SNFs to realize savings. Table 3 provides summary information on these DRGs, which represented 390,000 Medicare discharges in FY 1991. More detailed data used in the cost calculation can be found in Appendix B.

If the three day-rule is not in effect, patients in DRG i will spend two days in the hospital followed by:

$$(17) \quad SNF_Days_i = LOS_i - 2$$

days in a subacute SNF where LOS_i is the current length of stay in a hospital for the DRG.

The total per-case charges for the combined hospital stay and nursing home stay will be:

$$(18) \quad Tot_Chrg_i = Hospchrg_{i(1-2)} + (SNF_Days_i * SNF_Chrg_Day_i)$$

where $Hospchrg_{i(1-2)}$ is the hospital charge in DRG i for the first two days of stay and $(SNF_Days_i * SNF_Chrg_Day_i)$ is what a subacute SNF would charge to treat a patients after two days of a hospital stay.

Table 3: Subacute DRGs That Are Treatable in Nursing Homes - Required Hospital Stay of Two or Less Days

DRG Code	DRG Description	Medicare Discharges	Current Hospital Medicare Payment	Potential SNF Share	Current Hospital Days	Potential Hospital Days	Potential NH Days	Daily NH Charge
096	Bronchitis & asthma age >17 w cc	195,938	\$6,211	80%	7.30	2	5.30	\$300
239	Pathological fractures & musculoskeletal & conn tiss malignanc	60,693	\$7,328	80%	10.44	2	8.44	\$300
278	Cellulitis age >17 w/o cc	26,055	\$4,281	80%	6.56	2	4.56	\$350
296	Nutritional & misc metabolic disorders age >17 w cc	204,689	\$6,672	80%	8.62	2	6.62	\$200

An example of a DRG for which patients would need to receive only two days of hospitalization is DRG 239 (pathological fractures); these patients currently spend 10.44 days in the hospital at an average total payment per discharge of \$7,328. We are assuming that the hospital would charge \$1,420 for the first two days of stay and \$5,908 for the 8.44 remaining days of stay. There were 60,693 Medicare discharges in FY 1991 within this DRG. We are assuming that 80 percent of these patients could be moved to a subacute SNF at the end of their second day of hospitalization for 8.44 days (SNF_Days₂₃₉) and treated at a cost of \$300 a day (SNF_Chrg_Day₂₃₉), or \$2,532 in subacute SNF charges per case.

The savings to Medicare of moving a patient to a subacute SNF after two days of hospitalization is the difference between what a hospital and a subacute SNF would charge beginning on the third day of the patient's illness. This difference is \$5,908 - \$2,532 or \$3,376 per case. Once again, to calculate total savings for a DRG, the number of discharges must be multiplied by the share of patients who could be moved to a subacute SNF and then by the per-case savings. For this DRG, the clinical panel estimated that 80 percent of patients could be transferred to a subacute SNF. Multiplying the per-case savings by the number of cases from 1991, we obtain an estimate of the total savings to Medicare of treating this DRG partially in nursing homes of \$164 million in total (60,693 cases times 80 percent times \$3,376 per case), without the three-day rule in effect. To achieve these savings, however, it would be necessary to rebase the DRG and to divide payment between hospitals and subacute SNFs.

The three-day rule requires that a patient stay in the hospital for a third day when he or she could be moved to a subacute SNF. Under the three-day rule, Medicare therefore must pay the difference between what a hospital charges and what a subacute SNF charges for the third day of treatment. If hospital charges for this third day are higher than subacute SNF charges, the difference represents the cost to Medicare of the three-day rule for these DRGs.¹¹ Data on estimated hospital charges for the third day of treatment for these DRGs are given in Appendix B.

¹¹ If patients could be moved to subacute SNFs after one day of hospitalization, then the difference in charges for the second day of treatment would need to be considered.

To continue the example of DRG 239 (pathological fractures), a hospital would charge \$700 to treat a patient in the third day of treatment. A subacute SNF would charge Medicare \$300 for treating a patient in this DRG for this day of treatment. The per-patient difference of \$400 for this single day of treatment is the per-case cost of the three-day rule to Medicare. Projected for all 48,555 Medicare patients in the DRG in 1991 who could have been treated at subacute SNFs, the three-day rule imposed an additional cost of \$19.4 million to Medicare for these patients for delaying their move to a lower charge setting. This represents the reduction in rebased savings that could be obtained if the three-day rule were waived for this DRG.

For the four DRGs considered, the Medicare program could, through selective waiver of the three-day rule, realize savings of \$1.089 billion if it also rebased these DRGs. Without a waiver of the three-day rule, Medicare could still potentially realize savings of \$871 million if these DRGs were rebased and payment apportioned between hospitals and subacute SNFs.

CONCLUSIONS

This report has examined the extent to which freestanding skilled nursing facilities that provide comprehensive programs of subacute care can provide this care to Medicare patients. For purposes of this report, the potential demand for subacute care by Medicare patients has been defined in terms of 62 Diagnosis Related Groups. We have used DRGs to develop a working definition of subacute care that has enabled us to use available data on Medicare hospital inpatients and conduct the cost-benefit analyses presented in this report. The use of DRG-level data is not meant to provide a clinical definition of subacute care, but is necessary to evaluate changes in Medicare payment policies. We have concluded (based on the process that we asked clinicians to participate in) that subacute SNFs could have provided as many as 19.6 million days of treatment for Medicare patients in the DRGs in 1991. This represents nearly 54,000 fully occupied nursing home beds annually.

The report has developed estimates of the savings the Medicare program could potentially obtain if patients who are currently treated in hospitals were treated in subacute SNFs. Table 4 summarizes these savings under different payment options assuming that hospitals are not

Table 4

**Potential Medicare Savings
(\$ Billion with DRG Rebasing)
Excluding Payment for Costs of Empty Hospital Beds**

DRG Cohort	Three-Day Rule Retained	Three-Day Rule Waived
<i>No hospitalization required</i> 5 DRGs	\$0.217 B	\$0.519 B ¹
<i>3 or more days of hospitalization required</i> 53 DRGs ²	\$7.298 B	\$7.298 B
<i>2 days of hospitalization required</i> 4 DRGs	\$0.871 B	\$1.089 B
<i>Total</i> 62 DRGs	\$8.386 B	\$8.906 B

¹ These savings will be realized with or without rebasing of the hospital DRG Medicare payments, because the hospital stay is avoided if the three-day rule is waived.

² The savings for this DRG group are contingent entirely upon the rebasing of the hospital DRG Medicare payment and are not affected by the absence or presence of the three-day rule since all DRGs in this group require at least three days in the hospital.

reimbursed for the costs of empty beds. The total annual savings to the Medicare program were estimated to be approximately \$8.906 billion, assuming that Medicare's payment policies were changed. For most of the DRGs considered, it would be necessary to rebase the DRGs and/or otherwise divide payment between hospitals and subacute SNFs. For five of the DRGs, it would be possible to realize savings of \$519 million if patients could directly enter subacute SNFs. For Medicare to realize these savings, it would be necessary to selectively eliminate the requirement that these patients spend three days in a hospital before being transferred to a subacute SNF.

The estimates presented in Table 4 do not account for the costs of empty beds that hospitals would continue to bear if patients were transferred to subacute SNFs. In evaluating the cost of an empty hospital bed, it is necessary to consider only costs a hospital would bear if the bed were permanently empty, rather than temporarily unoccupied. If hospitals anticipate

that a bed will be empty, they can eventually adjust staffing and other resources used to serve patients. The costs of an empty bed are those property costs such as interest and depreciation that are borne in the long run whether or not a bed is occupied. Appendix C discusses these costs in more detail and reports the results of several econometric studies that have found that these long-run costs are about \$70 per day.¹²

Table 5 presents estimates of potential savings to Medicare (with DRG rebasing) if current hospital inpatients are treated in subacute SNFs and hospitals are reimbursed for empty beds at the rate of \$70 per day. With the three-day rule in effect, the costs of empty hospitals would be \$1.310 billion if all eligible patients were treated in subacute SNFs. If the three-day rule were not in effect, these costs would be \$1.371 billion. These costs are, however, only about 15 percent of the savings Medicare could realize if patients were treated in subacute SNFs.

These estimates of savings do not include any additional costs to Medicare of induced demand (the "woodwork effect") that could occur if Medicare-eligible patients bypassed hospitals and were treated directly at subacute SNFs. Medicare would incur these costs if demand for treatment by Medicare-eligible patients increased as a result of increased access to subacute SNFs. These increased costs are likely to be small, in that most Medicare patients who would be treated at subacute SNFs are currently treated as acute care hospital inpatients.

We have assumed that all candidates for subacute care would receive this care in a freestanding subacute SNF setting. The estimate defines the maximum potential number of acute care hospital inpatients who could be treated in subacute SNFs. Not all hospital patients would have access to subacute SNFs, and others might have access to alternative programs (e.g., hospital-based subacute, hospital rehabilitation units, home health).

¹² Appendix D discusses the operating costs that hospitals incur in the short-run if they maintain empty hospital beds on a "standby" basis in anticipation of future use. The appendix includes a table that shows the potential savings to Medicare if it reimburses hospitals for the short-run (operating) costs of empty beds.

Table 5

Potential Medicare Savings
 (\$ Billion with DRG Rebasing)
 Including Payment for Long-run Costs of Empty Hospital Beds

DRG Cohort	Three-Day Rule Retained	Three-Day Rule Waived
<i>No hospitalization required</i> 5 DRGs	\$0.178 B	\$0.446 B ¹
<i>3 or more days of hospitalization required</i> 53 DRGs ²	\$6.169 B	\$6.169 B
<i>2 days of hospitalization required</i> 4 DRGs	\$0.729 B	\$0.920 B
<i>Total</i> 62 DRGs	\$7.076 B	\$7.535 B

¹ These savings will be realized with or without rebasing of the hospital DRG Medicare payments, because the hospital stay is avoided if the three-day rule is waived.

² The savings for this DRG group are contingent entirely upon the rebasing of the hospital DRG Medicare payment and are not affected by the absence or presence of the three-day rule since all DRGs in this group require at least three days in the hospital.

Medicare could realize substantial savings if only a portion of patients identified in this report were to be treated in subacute SNFs. Further, there will be savings for the Medicare program even if the assumptions used to estimate savings were changed. Medicare will be in a position to realize these savings (given changes in payment policy) as long as patients currently treated in hospitals can receive treatment at a lower cost in a subacute SNF.

Appendix A

Clinical Panel Participants

Clinical Panel Participants

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Appendix B

Data Used to Compute Potential
Cost Savings to the
Medicare Program

Data for DRGs Requiring No Hospitalization

DRG Description DRG Code: 238
Osteomyelitis

Current Number of Discharges:	6,381
Total Current Medicare Hospital Payment:	\$11,464
Potential SNF Share:	80%
Current Hospital Days:	14.84
Hospital Cost for Days 1 & 2:	\$1,513
Hospital Cost for Day 3:	\$775
Daily Hospital Cost for Further Days:	\$775
Required Hospital Days:	0
Potential SNF Days:	14.84
SNF Cost Per Day:	\$350

With 3-Day Rule

Total Hospital Cost Per Case:	\$2,288
Total SNF Cost Per Case:	\$4,144
Combined Total Cost Per Case:	\$6,432

Potential Savings Per Case:	\$5,032
Potential Total Savings:	\$25,687,354

Cost of Empty Beds (\$70/day):	\$4,230,858
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Without 3-Day Rule

Total Hospital Cost Per Case:	\$0
Total SNF Cost Per Case:	\$5,194
Combined Total Cost Per Case:	\$5,194

Potential Savings Per Case:	\$6,270
Potential Total Savings:	\$32,007,096

Cost of Empty Beds (\$70/day):	\$5,302,866
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Data for DRGs Requiring No Hospitalization

DRG Description DRG Code: 243
Medical back problems

Current Number of Discharges: 117,272

Total Current Medicare Hospital Payment: \$4,759

Potential SNF Share: 50%

Current Hospital Days: 7.19

Hospital Cost for Days 1 & 2: \$1,334

Hospital Cost for Day 3: \$660

Daily Hospital Cost for Further Days: \$660

Required Hospital Days: 0

Potential SNF Days: 7.19

SNF Cost Per Day: \$250

With 3-Day Rule

Total Hospital Cost Per Case: \$1,994

Total SNF Cost Per Case: \$1,048

Combined Total Cost Per Case: \$3,042

Potential Savings Per Case: \$1,718

Potential Total Savings: \$100,730,784

Cost of Empty Beds (\$70/day): \$17,197,939

Without 3-Day Rule

Total Hospital Cost Per Case: \$0

Total SNF Cost Per Case: \$1,798

Combined Total Cost Per Case: \$1,798

Potential Savings Per Case: \$2,962

Potential Total Savings: \$173,673,968

Cost of Empty Beds (\$70/day): \$29,511,499

Data for DRGs Requiring No Hospitalization

DRG Description DRG Code: 254
Fx sprn strn & disl of uparm lowleg ex foot age >17 w/o cc

Current Number of Discharges:	14,324
Total Current Medicare Hospital Payment:	\$3,483
Potential SNF Share:	80%
Current Hospital Days:	5.82
Hospital Cost for Days 1 & 2:	\$1,191
Hospital Cost for Day 3:	\$600
Daily Hospital Cost for Further Days:	\$600
Required Hospital Days:	0
Potential SNF Days:	5.82
SNF Cost Per Day:	\$250

With 3-Day Rule

Total Hospital Cost Per Case:	\$1,791
Total SNF Cost Per Case:	\$705
Combined Total Cost Per Case:	\$2,496

Potential Savings Per Case:	\$987
Potential Total Savings:	\$11,310,230

Cost of Empty Beds (\$69/day):	\$2,262,046
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Without 3-Day Rule

Total Hospital Cost Per Case:	\$0
Total SNF Cost Per Case:	\$1,455
Combined Total Cost Per Case:	\$1,455

Potential Savings Per Case:	\$2,028
Potential Total Savings:	\$23,239,258

Cost of Empty Beds (\$69/day):	\$4,668,478
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Data for DRGs Requiring No Hospitalization

DRG Description DRG Code: 271
Skin ulcers

Current Number of Discharges:	20,018
Total Current Medicare Hospital Payment:	\$9,602
Potential SNF Share:	80%
Current Hospital Days:	14.58
Hospital Cost for Days 1 & 2:	\$1,048
Hospital Cost for Day 3:	\$680
Daily Hospital Cost for Further Days:	\$680
Required Hospital Days:	0
Potential SNF Days:	14.58
SNF Cost Per Day:	\$250

With 3-Day Rule

Total Hospital Cost Per Case:	\$1,728
Total SNF Cost Per Case:	\$2,895
Combined Total Cost Per Case:	\$4,623

Potential Savings Per Case:	\$4,979
Potential Total Savings:	\$79,742,103

Cost of Empty Beds (\$70/day):	\$12,981,273
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Without 3-Day Rule

Total Hospital Cost Per Case:	\$0
Total SNF Cost Per Case:	\$3,645
Combined Total Cost Per Case:	\$3,645

Potential Savings Per Case:	\$5,957
Potential Total Savings:	\$95,397,781

Cost of Empty Beds (\$70/day):	\$16,344,297
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Data for DRGs Requiring No Hospitalization

DRG Description DRG Code: 410
Chemotherapy w/o acute leukemia as secondary diagnosis

Current Number of Discharges: 136,216

Total Current Medicare Hospital Payment: \$4,121

Potential SNF Share: 50%

Current Hospital Days: 3.62

Hospital Cost for Days 1 & 2: \$2,277

Hospital Cost for Day 3: \$1,138

Daily Hospital Cost for Further Days: \$1,138

Required Hospital Days: 0

Potential SNF Days: 3.62

SNF Cost Per Day: \$350

With 3-Day Rule

Total Hospital Cost Per Case: \$3,415

Total SNF Cost Per Case: \$217

Combined Total Cost Per Case: \$3,632

Potential Savings Per Case: \$0

Potential Total Savings: \$0

Cost of Empty Beds (\$71/day): \$2,955,887

Without 3-Day Rule

Total Hospital Cost Per Case: \$0

Total SNF Cost Per Case: \$1,267

Combined Total Cost Per Case: \$1,267

Potential Savings Per Case: \$2,854

Potential Total Savings: \$194,380,232

Cost of Empty Beds (\$71/day): \$17,258,567

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	001
Craniotomy age >17 except for trauma		
Current Number of Discharges:		28,983
Total Current Medicare Hospital Payment:		\$27,166
Potential SNF Share:		50%
Current Hospital Days:		18.35
Required Hospital Cost :		\$19,651
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		10
Potential SNF Days:		8.35
SNF Cost Per Day:		\$350
Total Hospital Cost Per Case:		\$19,651
Total SNF Cost Per Case:		\$2,923
Total Cost Per Case:		\$22,574
Potential Savings Per Case:		\$4,593
Potential Total Savings:		\$66,552,214
Cost of Empty Beds (\$70/day):		\$8,470,282

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	012
Degenerative nervous system disorders		
Current Number of Discharges:		37,239
Total Current Medicare Hospital Payment:		\$12,416
Potential SNF Share:		80%
Current Hospital Days:		18.51
Required Hospital Cost :		\$2,259
Daily Additional Hospital Cost :		\$700
Required Hospital Days:		4
Potential SNF Days:		14.51
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$2,259
Total SNF Cost Per Case:		\$4,353
Total Cost Per Case:		\$6,612
Potential Savings Per Case:		\$5,804
Potential Total Savings:		\$172,908,125
Cost of Empty Beds (\$70/day):		\$30,258,922

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 014
Specific cerebrovascular disorders except TIA

Current Number of Discharges:	340,796
Total Current Medicare Hospital Payment:	\$9,051
Potential SNF Share:	50%
Current Hospital Days:	11.12
Required Hospital Cost :	\$5,390
Daily Additional Hospital Cost :	\$715
Required Hospital Days:	6
Potential SNF Days:	5.12
SNF Cost Per Day:	\$375
Total Hospital Cost Per Case:	\$5,390
Total SNF Cost Per Case:	\$1,920
Total Cost Per Case:	\$7,310
Potential Savings Per Case:	\$1,741
Potential Total Savings:	\$296,628,838
Cost of Empty Beds (\$80/day):	\$61,070,643

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 075
Major chest procedures

Current Number of Discharges:	30,824
Total Current Medicare Hospital Payment:	\$21,629
Potential SNF Share:	50%
Current Hospital Days:	14.17
Required Hospital Cost :	\$18,293
Daily Additional Hospital Cost :	\$800
Required Hospital Days:	10
Potential SNF Days:	4.17
SNF Cost Per Day:	\$350
Total Hospital Cost Per Case:	\$18,293
Total SNF Cost Per Case:	\$1,460
Total Cost Per Case:	\$19,753
Potential Savings Per Case:	\$1,877
Potential Total Savings:	\$28,920,618
Cost of Empty Beds (\$90/day):	\$4,498,763

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 076
Other respiratory system O.R. procedures w cc

Current Number of Discharges:	38,077
Total Current Medicare Hospital Payment:	\$16,987
Potential SNF Share:	50%
Current Hospital Days:	15.04
Required Hospital Cost :	\$13,207
Daily Additional Hospital Cost :	\$750
Required Hospital Days:	10
Potential SNF Days:	5.04
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$13,207
Total SNF Cost Per Case:	\$1,512
Total Cost Per Case:	\$14,719
Potential Savings Per Case:	\$2,268
Potential Total Savings:	\$43,179,318
Cost of Empty Beds (\$100/day):	\$6,716,783

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 079
Respiratory infections & inflammations age >17 w cc

Current Number of Discharges:	127,271
Total Current Medicare Hospital Payment:	\$12,125
Potential SNF Share:	80%
Current Hospital Days:	12.38
Required Hospital Cost :	\$5,689
Daily Additional Hospital Cost :	\$768
Required Hospital Days:	4
Potential SNF Days:	8.38
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$5,689
Total SNF Cost Per Case:	\$2,514
Total Cost Per Case:	\$8,203
Potential Savings Per Case:	\$3,922
Potential Total Savings:	\$399,309,199
Cost of Empty Beds (\$110/day):	\$59,725,735

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	085
Pleural effusion w cc		
Current Number of Discharges:		17,025
Total Current Medicare Hospital Payment:		\$7,997
Potential SNF Share:		50%
Current Hospital Days:		9.11
Required Hospital Cost :		\$4,420
Daily Additional Hospital Cost :		\$700
Required Hospital Days:		4
Potential SNF Days:		5.11
SNF Cost Per Day:		\$250
Total Hospital Cost Per Case:		\$4,420
Total SNF Cost Per Case:		\$1,277
Total Cost Per Case:		\$5,698
Potential Savings Per Case:		\$2,299
Potential Total Savings:		\$19,574,494
Cost of Empty Beds (\$120/day):		\$3,044,921

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	088
Chronic obstructive pulmonary disease		
Current Number of Discharges:		138,112
Total Current Medicare Hospital Payment:		\$7,019
Potential SNF Share:		80%
Current Hospital Days:		7.94
Required Hospital Cost :		\$3,473
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		4
Potential SNF Days:		3.94
SNF Cost Per Day:		\$400
Total Hospital Cost Per Case:		\$3,473
Total SNF Cost Per Case:		\$1,576
Total Cost Per Case:		\$5,049
Potential Savings Per Case:		\$1,970
Potential Total Savings:		\$217,664,512
Cost of Empty Beds (\$130/day):		\$30,473,032

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 089
Simple pneumonia & pleurisy age >17 w cc

Current Number of Discharges:	390,002
Total Current Medicare Hospital Payment:	\$7,747
Potential SNF Share:	50%
Current Hospital Days:	9.02
Required Hospital Cost :	\$4,308
Daily Additional Hospital Cost :	\$685
Required Hospital Days:	4
Potential SNF Days:	5.02
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$4,308
Total SNF Cost Per Case:	\$1,506
Total Cost Per Case:	\$5,814
Potential Savings Per Case:	\$1,933
Potential Total Savings:	\$376,878,433
Cost of Empty Beds (\$140/day):	\$68,523,351

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 090
Simple pneumonia & pleurisy age >17 w/o cc

Current Number of Discharges: 55,522

Total Current Medicare Hospital Payment: \$4,792

Potential SNF Share: 80%

Current Hospital Days: 6.71

Required Hospital Cost : \$2,195

Daily Additional Hospital Cost : \$700

Required Hospital Days: 3

Potential SNF Days: 3.71

SNF Cost Per Day: \$300

Total Hospital Cost Per Case: \$2,195

Total SNF Cost Per Case: \$1,113

Total Cost Per Case: \$3,308

Potential Savings Per Case: \$1,484

Potential Total Savings: \$65,915,718

Cost of Empty Beds (\$150/day): \$11,535,251

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	104
Cardiac valve procedure w pump & w cardiac cath		
Current Number of Discharges:		15,599
Total Current Medicare Hospital Payment:		\$63,505
Potential SNF Share:		50%
Current Hospital Days:		22.69
Required Hospital Cost :		\$56,553
Daily Additional Hospital Cost :		\$800
Required Hospital Days:		14
Potential SNF Days:		8.69
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$56,553
Total SNF Cost Per Case:		\$2,607
Total Cost Per Case:		\$59,160
Potential Savings Per Case:		\$4,345
Potential Total Savings:		\$33,888,828
Cost of Empty Beds (\$160/day):		\$4,744,436

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	105
Cardiac valve procedure w pump & w/o cardiac cath		
Current Number of Discharges:		14,675
Total Current Medicare Hospital Payment:		\$50,109
Potential SNF Share:		50%
Current Hospital Days:		16.7
Required Hospital Cost :		\$44,749
Daily Additional Hospital Cost :		\$800
Required Hospital Days:		10
Potential SNF Days:		6.7
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$44,749
Total SNF Cost Per Case:		\$2,010
Total Cost Per Case:		\$46,759
Potential Savings Per Case:		\$3,350
Potential Total Savings:		\$24,580,625
Cost of Empty Beds (\$170/day):		\$3,441,287

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	106
Coronary bypass w cardiac cath		
Current Number of Discharges:		57,824
Total Current Medicare Hospital Payment:		\$40,092
Potential SNF Share:		50%
Current Hospital Days:		15.89
Required Hospital Cost :		\$32,091
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		7
Potential SNF Days:		8.89
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$32,091
Total SNF Cost Per Case:		\$2,667
Total Cost Per Case:		\$34,758
Potential Savings Per Case:		\$5,334
Potential Total Savings:		\$154,216,608
Cost of Empty Beds (\$180/day):		\$17,991,938

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	107
Coronary bypass w/o cardiac cath		
Current Number of Discharges:		43,852
Total Current Medicare Hospital Payment:		\$32,143
Potential SNF Share:		50%
Current Hospital Days:		12.26
Required Hospital Cost :		\$26,509
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		6
Potential SNF Days:		6.26
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$26,509
Total SNF Cost Per Case:		\$1,878
Total Cost Per Case:		\$28,387
Potential Savings Per Case:		\$3,756
Potential Total Savings:		\$82,354,056
Cost of Empty Beds (\$190/day):		\$9,607,973

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 113
Amputation for circ system disorders except upper limb & toe

Current Number of Discharges:	33,927
Total Current Medicare Hospital Payment:	\$17,875
Potential SNF Share:	80%
Current Hospital Days:	18.47
Required Hospital Cost :	\$5,752
Daily Additional Hospital Cost :	\$900
Required Hospital Days:	5
Potential SNF Days:	13.47
SNF Cost Per Day:	\$350
Total Hospital Cost Per Case:	\$5,752
Total SNF Cost Per Case:	\$4,715
Total Cost Per Case:	\$10,467
Potential Savings Per Case:	\$7,408
Potential Total Savings:	\$201,078,544
Cost of Empty Beds (\$200/day):	\$25,591,815

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 121
Circulatory disorders w AMI & c.v. comp disch alive

Current Number of Discharges: 133,417

Total Current Medicare Hospital Payment: \$11,131

Potential SNF Share: 20%

Current Hospital Days: 10.06

Required Hospital Cost : \$6,698

Daily Additional Hospital Cost : \$876

Required Hospital Days: 5

Potential SNF Days: 5.06

SNF Cost Per Day: \$300

Total Hospital Cost Per Case: \$6,698

Total SNF Cost Per Case: \$1,518

Total Cost Per Case: \$8,216

Potential Savings Per Case: \$2,915

Potential Total Savings: \$77,770,370

Cost of Empty Beds (\$210/day): \$9,451,260

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	126
Acute & subacute endocarditis		
Current Number of Discharges:		3,951
Total Current Medicare Hospital Payment:		\$20,546
Potential SNF Share:		80%
Current Hospital Days:		22.03
Required Hospital Cost :		\$9,274
Daily Additional Hospital Cost :		\$750
Required Hospital Days:		7
Potential SNF Days:		15.03
SNF Cost Per Day:		\$400
Total Hospital Cost Per Case:		\$9,274
Total SNF Cost Per Case:		\$6,012
Total Cost Per Case:		\$15,286
Potential Savings Per Case:		\$5,261
Potential Total Savings:		\$16,627,388
Cost of Empty Beds (\$220/day):		\$3,325,478

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	127
Heart failure & shock		
Current Number of Discharges:		575,993
Total Current Medicare Hospital Payment:		\$7,042
Potential SNF Share:		50%
Current Hospital Days:		7.98
Required Hospital Cost :		\$4,054
Daily Additional Hospital Cost :		\$600
Required Hospital Days:		3
Potential SNF Days:		4.98
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$4,054
Total SNF Cost Per Case:		\$1,494
Total Cost Per Case:		\$5,548
Potential Savings Per Case:		\$1,494
Potential Total Savings:		\$430,266,771
Cost of Empty Beds (\$230/day):		\$100,395,580

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	128
Deep vein thrombophlebitis		
Current Number of Discharges:		25,452
Total Current Medicare Hospital Payment:		\$5,306
Potential SNF Share:		80%
Current Hospital Days:		8.6
Required Hospital Cost :		\$1,851
Daily Additional Hospital Cost :		\$617
Required Hospital Days:		3
Potential SNF Days:		5.6
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$1,851
Total SNF Cost Per Case:		\$1,680
Total Cost Per Case:		\$3,531
Potential Savings Per Case:		\$1,775
Potential Total Savings:		\$36,145,912
Cost of Empty Beds (\$240/day):		\$7,981,747

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	130
Peripheral vascular disorders w cc		
Current Number of Discharges:		67,892
Total Current Medicare Hospital Payment:		\$6,511
Potential SNF Share:		80%
Current Hospital Days:		8.41
Required Hospital Cost :		\$2,881
Daily Additional Hospital Cost :		\$671
Required Hospital Days:		3
Potential SNF Days:		5.41
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$2,881
Total SNF Cost Per Case:		\$1,623
Total Cost Per Case:		\$4,504
Potential Savings Per Case:		\$2,007
Potential Total Savings:		\$109,013,370
Cost of Empty Beds (\$250/day):		\$20,568,560

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	148
Major small & large bowel procedures w cc		
Current Number of Discharges:		137,277
Total Current Medicare Hospital Payment:		\$23,377
Potential SNF Share:		50%
Current Hospital Days:		16.97
Required Hospital Cost :		\$16,204
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		9
Potential SNF Days:		7.97
SNF Cost Per Day:		\$325
Total Hospital Cost Per Case:		\$16,204
Total SNF Cost Per Case:		\$2,590
Total Cost Per Case:		\$18,794
Potential Savings Per Case:		\$4,583
Potential Total Savings:		\$314,553,086
Cost of Empty Beds (\$260/day):		\$38,293,419

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	150
Peritoneal adhesiolysis w cc		
Current Number of Discharges:		20,843
Total Current Medicare Hospital Payment:		\$18,029
Potential SNF Share:		50%
Current Hospital Days:		14.23
Required Hospital Cost :		\$12,245
Daily Additional Hospital Cost :		\$800
Required Hospital Days:		7
Potential SNF Days:		7.23
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$12,245
Total SNF Cost Per Case:		\$2,169
Total Cost Per Case:		\$14,414
Potential Savings Per Case:		\$3,615
Potential Total Savings:		\$37,673,723
Cost of Empty Beds (\$270/day):		\$5,274,321

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 154
Stomach esophageal & duodenal procedures age >17 w cc

Current Number of Discharges: 39,942

Total Current Medicare Hospital Payment: \$30,888

Potential SNF Share: 50%

Current Hospital Days: 19.34

Required Hospital Cost : \$20,614

Daily Additional Hospital Cost : \$1,100

Required Hospital Days: 10

Potential SNF Days: 9.34

SNF Cost Per Day: \$700

Total Hospital Cost Per Case: \$20,614

Total SNF Cost Per Case: \$6,538

Total Cost Per Case: \$27,152

Potential Savings Per Case: \$3,736

Potential Total Savings: \$74,611,656

Cost of Empty Beds (\$280/day): \$13,057,040

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 170
Other digestive system O.R. procedures w cc

Current Number of Discharges:	12,622
Total Current Medicare Hospital Payment:	\$20,713
Potential SNF Share:	50%
Current Hospital Days:	16.88
Required Hospital Cost :	\$17,053
Daily Additional Hospital Cost :	\$750
Required Hospital Days:	12
Potential SNF Days:	4.88
SNF Cost Per Day:	\$350
Total Hospital Cost Per Case:	\$17,053
Total SNF Cost Per Case:	\$1,708
Total Cost Per Case:	\$18,761
Potential Savings Per Case:	\$1,952
Potential Total Savings:	\$12,319,072
Cost of Empty Beds (\$290/day):	\$2,155,838

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	172
Digestive malignancy w cc		
Current Number of Discharges:		32,119
Total Current Medicare Hospital Payment:		\$9,021
Potential SNF Share:		80%
Current Hospital Days:		10.76
Required Hospital Cost :		\$5,213
Daily Additional Hospital Cost :		\$800
Required Hospital Days:		6
Potential SNF Days:		4.76
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$5,213
Total SNF Cost Per Case:		\$1,428
Total Cost Per Case:		\$6,641
Potential Savings Per Case:		\$2,380
Potential Total Savings:		\$61,154,576
Cost of Empty Beds (\$300/day):		\$8,561,641

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	195
Total cholecystectomy w C.D.E. w cc		
Current Number of Discharges:		19,766
Total Current Medicare Hospital Payment:		\$15,442
Potential SNF Share:		50%
Current Hospital Days:		12.61
Required Hospital Cost :		\$11,235
Daily Additional Hospital Cost :		\$750
Required Hospital Days:		7
Potential SNF Days:		5.61
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$11,235
Total SNF Cost Per Case:		\$1,683
Total Cost Per Case:		\$12,918
Potential Savings Per Case:		\$2,524
Potential Total Savings:		\$24,949,633
Cost of Empty Beds (\$310/day):		\$3,881,054

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	197
Cholecystectomy w/o C.D.E. w cc		
Current Number of Discharges:		69,180
Total Current Medicare Hospital Payment:		\$11,353
Potential SNF Share:		50%
Current Hospital Days:		9.38
Required Hospital Cost :		\$7,411
Daily Additional Hospital Cost :		\$900
Required Hospital Days:		5
Potential SNF Days:		4.38
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$7,411
Total SNF Cost Per Case:		\$1,314
Total Cost Per Case:		\$8,725
Potential Savings Per Case:		\$2,628
Potential Total Savings:		\$90,902,520
Cost of Empty Beds (\$320/day):		\$10,605,294

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 199
Hepatobiliary diagnostic procedure for malignancy

Current Number of Discharges:	2,942
Total Current Medicare Hospital Payment:	\$17,116
Potential SNF Share:	20%
Current Hospital Days:	15.53
Required Hospital Cost :	\$11,145
Daily Additional Hospital Cost :	\$700
Required Hospital Days:	7
Potential SNF Days:	8.53
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$11,145
Total SNF Cost Per Case:	\$2,559
Total Cost Per Case:	\$13,704
Potential Savings Per Case:	\$3,412
Potential Total Savings:	\$2,007,621
Cost of Empty Beds (\$330/day):	\$351,334

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 205
Disorders of liver except malig cirr alc hepa w cc

Current Number of Discharges:	21,011
Total Current Medicare Hospital Payment:	\$8,867
Potential SNF Share:	20%
Current Hospital Days:	9.54
Required Hospital Cost :	\$6,835
Daily Additional Hospital Cost :	\$800
Required Hospital Days:	7
Potential SNF Days:	2.54
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$6,835
Total SNF Cost Per Case:	\$762
Total Cost Per Case:	\$7,597
Potential Savings Per Case:	\$1,270
Potential Total Savings:	\$5,336,794
Cost of Empty Beds (\$340/day):	\$747,151

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 209
Major joint & limb reattachment procedures of lower extremity

Current Number of Discharges: 247,763

Total Current Medicare Hospital Payment: \$16,199

Potential SNF Share: 90%

Current Hospital Days: 11.35

Required Hospital Cost : \$8,333

Daily Additional Hospital Cost : \$942

Required Hospital Days: 3

Potential SNF Days: 8.35

SNF Cost Per Day: \$350

Total Hospital Cost Per Case: \$8,333

Total SNF Cost Per Case: \$2,923

Total Cost Per Case: \$11,256

Potential Savings Per Case: \$4,943

Potential Total Savings: \$1,102,267,855

Cost of Empty Beds (\$350/day): \$130,335,726

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	210
Hip & femur procedures except major joint age >17 w cc		
Current Number of Discharges:		109,312
Total Current Medicare Hospital Payment:		\$13,980
Potential SNF Share:		90%
Current Hospital Days:		14.04
Required Hospital Cost :		\$7,146
Daily Additional Hospital Cost :		\$850
Required Hospital Days:		6
Potential SNF Days:		8.04
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$7,146
Total SNF Cost Per Case:		\$2,412
Total Cost Per Case:		\$9,558
Potential Savings Per Case:		\$4,422
Potential Total Savings:		\$435,039,898
Cost of Empty Beds (\$360/day):		\$55,368,714

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 211
 Hip & femur procedures except major joint age >17 w/o cc

Current Number of Discharges:	32,548
Total Current Medicare Hospital Payment:	\$9,418
Potential SNF Share:	90%
Current Hospital Days:	10.76
Required Hospital Cost :	\$2,822
Daily Additional Hospital Cost :	\$850
Required Hospital Days:	3
Potential SNF Days:	7.76
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$2,822
Total SNF Cost Per Case:	\$2,328
Total Cost Per Case:	\$5,150
Potential Savings Per Case:	\$4,268
Potential Total Savings:	\$125,023,378
Cost of Empty Beds (\$370/day):	\$15,912,000

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 213
 Amputation for musculoskeletal system & conn tiss disorders

Current Number of Discharges: 5,677

Total Current Medicare Hospital Payment: \$13,126

Potential SNF Share: 80%

Current Hospital Days: 13.44

Required Hospital Cost : \$7,974

Daily Additional Hospital Cost : \$800

Required Hospital Days: 7

Potential SNF Days: 6.44

SNF Cost Per Day: \$350

Total Hospital Cost Per Case: \$7,974

Total SNF Cost Per Case: \$2,254

Total Cost Per Case: \$10,228

Potential Savings Per Case: \$2,898

Potential Total Savings: \$13,161,557

Cost of Empty Beds (\$380/day): \$2,047,353

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	214
Back & neck procedures w cc		
Current Number of Discharges:		37,293
Total Current Medicare Hospital Payment:		\$14,015
Potential SNF Share:		80%
Current Hospital Days:		11.51
Required Hospital Cost :		\$11,032
Daily Additional Hospital Cost :		\$850
Required Hospital Days:		8
Potential SNF Days:		3.51
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$11,032
Total SNF Cost Per Case:		\$1,053
Total Cost Per Case:		\$12,085
Potential Savings Per Case:		\$1,930
Potential Total Savings:		\$57,595,309
Cost of Empty Beds (\$390/day):		\$7,330,312

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 217
WND debrid & skin graft except hand for muscskelet & con tiss dis

Current Number of Discharges:	15,786
Total Current Medicare Hospital Payment:	\$23,867
Potential SNF Share:	80%
Current Hospital Days:	22.74
Required Hospital Cost :	\$14,949
Daily Additional Hospital Cost :	\$700
Required Hospital Days:	10
Potential SNF Days:	12.74
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$14,949
Total SNF Cost Per Case:	\$3,822
Total Cost Per Case:	\$18,771
Potential Savings Per Case:	\$5,096
Potential Total Savings:	\$64,356,365
Cost of Empty Beds (\$400/day):	\$11,262,364

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	235
Fractures of femur		
Current Number of Discharges:		7,427
Total Current Medicare Hospital Payment:		\$9,021
Potential SNF Share:		80%
Current Hospital Days:		14.61
Required Hospital Cost :		\$2,655
Daily Additional Hospital Cost :		\$600
Required Hospital Days:		4
Potential SNF Days:		10.61
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$2,655
Total SNF Cost Per Case:		\$3,183
Total Cost Per Case:		\$5,838
Potential Savings Per Case:		\$3,183
Potential Total Savings:		\$18,912,113
Cost of Empty Beds (\$410/day):		\$4,412,826

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	236
Fractures of hip & pelvis		
Current Number of Discharges:		48,731
Total Current Medicare Hospital Payment:		\$7,744
Potential SNF Share:		80%
Current Hospital Days:		12.09
Required Hospital Cost :		\$1,954
Daily Additional Hospital Cost :		\$637
Required Hospital Days:		3
Potential SNF Days:		9.09
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$1,954
Total SNF Cost Per Case:		\$2,727
Total Cost Per Case:		\$4,681
Potential Savings Per Case:		\$3,063
Potential Total Savings:		\$119,423,307
Cost of Empty Beds (\$420/day):		\$24,806,028

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 263
Skin graft &/or debrid for skin ulcer or cellulitis w cc

Current Number of Discharges:	26,265
Total Current Medicare Hospital Payment:	\$19,547
Potential SNF Share:	80%
Current Hospital Days:	22.44
Required Hospital Cost :	\$8,739
Daily Additional Hospital Cost :	\$700
Required Hospital Days:	7
Potential SNF Days:	15.44
SNF Cost Per Day:	\$250
Total Hospital Cost Per Case:	\$8,739
Total SNF Cost Per Case:	\$3,860
Total Cost Per Case:	\$12,599
Potential Savings Per Case:	\$6,948
Potential Total Savings:	\$145,991,376
Cost of Empty Beds (\$430/day):	\$22,709,770

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	264
Skin graft &/or debrid for skin ulcer or cellulitis w/o cc		
Current Number of Discharges:		4,741
Total Current Medicare Hospital Payment:		\$9,370
Potential SNF Share:		80%
Current Hospital Days:		12.2
Required Hospital Cost :		\$4,690
Daily Additional Hospital Cost :		\$650
Required Hospital Days:		5
Potential SNF Days:		7.2
SNF Cost Per Day:		\$250
Total Hospital Cost Per Case:		\$4,690
Total SNF Cost Per Case:		\$1,800
Total Cost Per Case:		\$6,490
Potential Savings Per Case:		\$2,880
Potential Total Savings:		\$10,889,397
Cost of Empty Beds (\$440/day):		\$1,905,644

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 277
Cellulitis age >17 w cc

Current Number of Discharges:	66,401
Total Current Medicare Hospital Payment:	\$6,470
Potential SNF Share:	50%
Current Hospital Days:	8.81
Required Hospital Cost :	\$3,612
Daily Additional Hospital Cost :	\$750
Required Hospital Days:	5
Potential SNF Days:	3.81
SNF Cost Per Day:	\$350
Total Hospital Cost Per Case:	\$3,612
Total SNF Cost Per Case:	\$1,334
Total Cost Per Case:	\$4,946
Potential Savings Per Case:	\$1,524
Potential Total Savings:	\$50,597,562
Cost of Empty Beds (\$450/day):	\$8,854,573

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 285

Amputation of lower limb for endocrine nutrit & metabol disorders

Current Number of Discharges: 4,324

Total Current Medicare Hospital Payment: \$19,973

Potential SNF Share: 80%

Current Hospital Days: 21.36

Required Hospital Cost : \$11,453

Daily Additional Hospital Cost : \$750

Required Hospital Days: 10

Potential SNF Days: 11.36

SNF Cost Per Day: \$375

Total Hospital Cost Per Case: \$11,453

Total SNF Cost Per Case: \$4,260

Total Cost Per Case: \$15,713

Potential Savings Per Case: \$4,260

Potential Total Savings: \$14,692,146

Cost of Empty Beds (\$460/day): \$2,742,534

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 287
Skin graft & wound debrid for endoc nutrit & metabol disorders

Current Number of Discharges:	6,072
Total Current Medicare Hospital Payment:	\$17,009
Potential SNF Share:	80%
Current Hospital Days:	20.65
Required Hospital Cost :	\$9,022
Daily Additional Hospital Cost :	\$750
Required Hospital Days:	10
Potential SNF Days:	10.65
SNF Cost Per Day:	\$400
Total Hospital Cost Per Case:	\$9,022
Total SNF Cost Per Case:	\$4,260
Total Cost Per Case:	\$13,282
Potential Savings Per Case:	\$3,727
Potential Total Savings:	\$18,106,704
Cost of Empty Beds (\$470/day):	\$3,621,341

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 294
Diabetes age >35

Current Number of Discharges:	93,133
Total Current Medicare Hospital Payment:	\$5,425
Potential SNF Share:	50%
Current Hospital Days:	7.59
Required Hospital Cost :	\$2,143
Daily Additional Hospital Cost :	\$715
Required Hospital Days:	3
Potential SNF Days:	4.59
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$2,143
Total SNF Cost Per Case:	\$1,377
Total Cost Per Case:	\$3,520
Potential Savings Per Case:	\$1,905
Potential Total Savings:	\$88,702,198
Cost of Empty Beds (\$480/day):	\$14,961,816

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 320
 Kidney & urinary tract infections age >17 w cc

Current Number of Discharges:	155,650
Total Current Medicare Hospital Payment:	\$7,061
Potential SNF Share:	80%
Current Hospital Days:	8.81
Required Hospital Cost :	\$2,593
Daily Additional Hospital Cost :	\$769
Required Hospital Days:	3
Potential SNF Days:	5.81
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$2,593
Total SNF Cost Per Case:	\$1,743
Total Cost Per Case:	\$4,336
Potential Savings Per Case:	\$2,725
Potential Total Savings:	\$339,303,303
Cost of Empty Beds (\$490/day):	\$50,642,284

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 331
 Other kidney & urinary tract diagnoses age >17 w cc

Current Number of Discharges:	28,333
Total Current Medicare Hospital Payment:	\$7,150
Potential SNF Share:	20%
Current Hospital Days:	7.68
Required Hospital Cost :	\$5,274
Daily Additional Hospital Cost :	\$700
Required Hospital Days:	5
Potential SNF Days:	2.68
SNF Cost Per Day:	\$300
Total Hospital Cost Per Case:	\$5,274
Total SNF Cost Per Case:	\$804
Total Cost Per Case:	\$6,078
Potential Savings Per Case:	\$1,072
Potential Total Savings:	\$6,074,595
Cost of Empty Beds (\$500/day):	\$1,063,054

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	403
Lymphoma & non-acute leukemia w cc		
Current Number of Discharges:		27,380
Total Current Medicare Hospital Payment:		\$11,579
Potential SNF Share:		20%
Current Hospital Days:		12.08
Required Hospital Cost :		\$7,769
Daily Additional Hospital Cost :		\$750
Required Hospital Days:		7
Potential SNF Days:		5.08
SNF Cost Per Day:		\$300
Total Hospital Cost Per Case:		\$7,769
Total SNF Cost Per Case:		\$1,524
Total Cost Per Case:		\$9,293
Potential Savings Per Case:		\$2,286
Potential Total Savings:		\$12,518,136
Cost of Empty Beds (\$510/day):		\$1,947,266

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 413
Other myeloprolif dis or poorly diff neopl diag w cc

Current Number of Discharges: 10,331

Total Current Medicare Hospital Payment: \$9,178

Potential SNF Share: 20%

Current Hospital Days: 11.18

Required Hospital Cost : \$6,043

Daily Additional Hospital Cost : \$750

Required Hospital Days: 7

Potential SNF Days: 4.18

SNF Cost Per Day: \$350

Total Hospital Cost Per Case: \$6,043

Total SNF Cost Per Case: \$1,463

Total Cost Per Case: \$7,506

Potential Savings Per Case: \$1,672

Potential Total Savings: \$3,454,686

Cost of Empty Beds (\$520/day): \$604,570

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 416
Septicemia age >17

Current Number of Discharges: 126,072

Total Current Medicare Hospital Payment: \$10,739

Potential SNF Share: 80%

Current Hospital Days: 10.79

Required Hospital Cost : \$4,968

Daily Additional Hospital Cost : \$850

Required Hospital Days: 4

Potential SNF Days: 6.79

SNF Cost Per Day: \$300

Total Hospital Cost Per Case: \$4,968

Total SNF Cost Per Case: \$2,037

Total Cost Per Case: \$7,005

Potential Savings Per Case: \$3,734

Potential Total Savings: \$376,652,707

Cost of Empty Beds (\$530/day): \$47,937,617

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	439
Skin grafts for injuries		
Current Number of Discharges:		1,041
Total Current Medicare Hospital Payment:		\$12,545
Potential SNF Share:		80%
Current Hospital Days:		11.78
Required Hospital Cost :		\$9,438
Daily Additional Hospital Cost :		\$650
Required Hospital Days:		7
Potential SNF Days:		4.78
SNF Cost Per Day:		\$350
Total Hospital Cost Per Case:		\$9,438
Total SNF Cost Per Case:		\$1,673
Total Cost Per Case:		\$11,111
Potential Savings Per Case:		\$1,434
Potential Total Savings:		\$1,194,235
Cost of Empty Beds (\$540/day):		\$278,655

Data for DRGs Requiring Three or More Days of Hospitalization

<u>DRG Description</u>	DRG Code:	462
Rehabilitation		
Current Number of Discharges:		112,550
Total Current Medicare Hospital Payment:		\$15,630
Potential SNF Share:		80%
Current Hospital Days:		21.72
Required Hospital Cost :		\$2,526
Daily Additional Hospital Cost :		\$700
Required Hospital Days:		3
Potential SNF Days:		18.72
SNF Cost Per Day:		\$350
Total Hospital Cost Per Case:		\$2,526
Total SNF Cost Per Case:		\$6,552
Total Cost Per Case:		\$9,078
Potential Savings Per Case:		\$6,552
Potential Total Savings:		\$589,942,080
Cost of Empty Beds (\$550/day):		\$117,988,416

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 468
Extensive O.R. procedure unrelated to principal diagnosis

Current Number of Discharges:	76,095
Total Current Medicare Hospital Payment:	\$24,464
Potential SNF Share:	20%
Current Hospital Days:	19.7
Required Hospital Cost :	\$13,934
Daily Additional Hospital Cost :	\$900
Required Hospital Days:	8
Potential SNF Days:	11.7
SNF Cost Per Day:	\$350
Total Hospital Cost Per Case:	\$13,934
Total SNF Cost Per Case:	\$4,095
Total Cost Per Case:	\$18,029
Potential Savings Per Case:	\$6,435
Potential Total Savings:	\$97,934,265
Cost of Empty Beds (\$560/day):	\$12,464,361

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 471
 Bilateral or multiple major joint procs of lower extremity

Current Number of Discharges:	6,218
Total Current Medicare Hospital Payment:	\$27,805
Potential SNF Share:	90%
Current Hospital Days:	15.93
Required Hospital Cost :	\$19,861
Daily Additional Hospital Cost :	\$800
Required Hospital Days:	6
Potential SNF Days:	9.93
SNF Cost Per Day:	\$400
Total Hospital Cost Per Case:	\$19,861
Total SNF Cost Per Case:	\$3,972
Total Cost Per Case:	\$23,833
Potential Savings Per Case:	\$3,972
Potential Total Savings:	\$22,228,106
Cost of Empty Beds (\$570/day):	\$3,889,919

Data for DRGs Requiring Three or More Days of Hospitalization

DRG Description DRG Code: 475
Respiratory system diagnosis with ventilator support

Current Number of Discharges: 77,006

Total Current Medicare Hospital Payment: \$25,250

Potential SNF Share: 50%

Current Hospital Days: 14.53

Required Hospital Cost : \$20,273

Daily Additional Hospital Cost : \$900

Required Hospital Days: 9

Potential SNF Days: 5.53

SNF Cost Per Day: \$400

Total Hospital Cost Per Case: \$20,273

Total SNF Cost Per Case: \$2,212

Total Cost Per Case: \$22,485

Potential Savings Per Case: \$2,765

Potential Total Savings: \$106,460,795

Cost of Empty Beds (\$580/day): \$14,904,511

Data for DRGs Requiring Fewer Than Three Days of Hospitalization

DRG Description DRG Code: 096

Bronchitis & asthma age >17 w cc

Current Number of Discharges: 195,938

Total Current Medicare Hospital Payment: \$6,211

Potential SNF Share: 80%

Current Hospital Days: 7.3

Hospital Cost for Days 1 & 2: \$2,400

Hospital Cost for Day 3: \$900

Daily Hospital Cost for Further Days: \$677

Required Hospital Days: 2

Potential SNF Days: 5.3

SNF Cost Per Day: \$300

With 3-Day Rule

Total Hospital Cost Per Case: \$3,300

Total SNF Cost Per Case: \$1,290

Combined Total Cost Per Case: \$4,590

Potential Savings Per Case: \$1,621

Potential Total Savings: \$254,108,073

Cost of Empty Beds (\$70/day): \$47,181,870

Without 3-Day Rule

Total Hospital Cost Per Case: \$2,400

Total SNF Cost Per Case: \$1,590

Combined Total Cost Per Case: \$3,990

Potential Savings Per Case: \$2,221

Potential Total Savings: \$348,158,313

Cost of Empty Beds (\$70/day): \$58,154,398

Data for DRGs Requiring Fewer Than Three Days of Hospitalization

DRG Description DRG Code: 239
 Pathological fractures & musculoskeletal & conn tiss malignancy

Current Number of Discharges: 60,693

Total Current Medicare Hospital Payment: \$7,328

Potential SNF Share: 80%

Current Hospital Days: 10.44

Hospital Cost for Days 1 & 2: \$1,420

Hospital Cost for Day 3: \$700

Daily Hospital Cost for Further Days: \$700

Required Hospital Days: 2

Potential SNF Days: 8.44

SNF Cost Per Day: \$300

With 3-Day Rule

Total Hospital Cost Per Case: \$2,120

Total SNF Cost Per Case: \$2,232

Combined Total Cost Per Case: \$4,352

Potential Savings Per Case: \$2,976

Potential Total Savings: \$144,497,894

Cost of Empty Beds (\$70/day): \$25,287,132

Without 3-Day Rule

Total Hospital Cost Per Case: \$1,420

Total SNF Cost Per Case: \$2,532

Combined Total Cost Per Case: \$3,952

Potential Savings Per Case: \$3,376

Potential Total Savings: \$163,919,654

Cost of Empty Beds (\$70/day): \$28,685,940

Data for DRGs Requiring Fewer Than Three Days of Hospitalization

DRG Description DRG Code: 278

Cellulitis age >17 w/o cc

Current Number of Discharges: 26,055

Total Current Medicare Hospital Payment: \$4,281

Potential SNF Share: 80%

Current Hospital Days: 6.56

Hospital Cost for Days 1 & 2: \$1,317

Hospital Cost for Day 3: \$650

Daily Hospital Cost for Further Days: \$650

Required Hospital Days: 2

Potential SNF Days: 4.56

SNF Cost Per Day: \$350

With 3-Day Rule

Total Hospital Cost Per Case: \$1,967

Total SNF Cost Per Case: \$1,246

Combined Total Cost Per Case: \$3,213

Potential Savings Per Case: \$1,068

Potential Total Savings: \$22,261,392

Cost of Empty Beds (\$70/day): \$5,194,325

Without 3-Day Rule

Total Hospital Cost Per Case: \$1,317

Total SNF Cost Per Case: \$1,596

Combined Total Cost Per Case: \$2,913

Potential Savings Per Case: \$1,368

Potential Total Savings: \$28,514,592

Cost of Empty Beds (\$70/day): \$6,653,405

Data for DRGs Requiring Fewer Than Three Days of Hospitalization

DRG Description DRG Code: 296
Nutritional & misc metabolic disorders age >17 w cc

Current Number of Discharges:	204,689
Total Current Medicare Hospital Payment:	\$6,672
Potential SNF Share:	80%
Current Hospital Days:	8.62
Hospital Cost for Days 1 & 2:	\$2,000
Hospital Cost for Day 3:	\$800
Daily Hospital Cost for Further Days:	\$689
Required Hospital Days:	2
Potential SNF Days:	6.62
SNF Cost Per Day:	\$200

With 3-Day Rule

Total Hospital Cost Per Case:	\$2,800
Total SNF Cost Per Case:	\$1,124
Combined Total Cost Per Case:	\$3,924

Potential Savings Per Case:	\$2,748
Potential Total Savings:	\$450,017,773

Cost of Empty Beds (\$70/day):	\$64,419,722
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Without 3-Day Rule

Total Hospital Cost Per Case:	\$2,000
Total SNF Cost Per Case:	\$1,324
Combined Total Cost Per Case:	\$3,324

Potential Savings Per Case:	\$3,348
Potential Total Savings:	\$548,268,493

Cost of Empty Beds (\$70/day):	\$75,882,306
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Appendix C

Long-run Costs
of Empty Hospital Beds

The Costs of an Empty Hospital Bed

An analysis of savings to Medicare from moving hospital patients to subacute SNFs homes must include an estimate of the potential costs of moving the patients. The major potential cost to be considered is the cost of the potential resultant unfilled hospital beds borne by hospitals. In considering the cost of an empty bed, it is necessary to consider what costs a hospital must incur if it anticipates that a bed will be empty.

On any given day of normal operation, a hospital may have beds that are unexpectedly empty. These beds can be quite costly because the hospital must retain staff who serve patients occupying these beds (e.g., nursing, housekeeping), along with all of the functions used to serve patients (e.g., laboratories, diagnostic equipment, food services). A hospital will bear these costs on a given day whether the bed is occupied or not.

The appropriate means of estimating the cost of an empty bed is not the cost of a bed that the hospital expects to be occupied. Rather, one must consider the costs in the long-run the hospital incurs if it can anticipate that the bed will be empty. In this case, a hospital will adjust its staffing and other services to serve a smaller number of patients. There will be little if any staff associated with these beds and costs per bed will be lower.

There have been a number of studies of the cost of an empty hospital bed, and several of these have taken account of beds that are anticipated to be empty. Four econometric studies have specifically accounted for the expectations of whether a bed is to be occupied or not. Two studies conducted by Friedman and Pauly (1981, 1983) cover the 1973-78 time period for 870 hospitals across the United States¹. A third study, by Pauly and Wilson (1986)², covers 196

¹ Friedman B, Pauly M. Cost functions for a service firm with variable quality and stochastic demand: The case of hospitals. *The Review of Economics and Statistics* 63:620-624, 1981.

Friedman B, Pauly M. A new approach to hospital cost functions and some issues in revenue regulation. *Health Care Financing Review* 4: 105-114, 1983.

hospitals in Michigan from 1979 to 1982. The final study, by the Center for Hospital Financial Management (1990), uses data from 1987 for over 5,000 short-term hospitals.³

The studies include different estimates of the cost of an empty hospital bed, depending in part on different definitions of costs and number of beds at a hospital. Nevertheless, the different studies suggest that the cost of a hospital bed that is expected to be empty is relatively low compared to the cost of a bed that is fully staffed and expected to be in operation. These studies are summarized in the attached table. The cost figures are on an annual basis. Since the data cover different periods of time, we have adjusted cost figures to 1993 dollars based on the Medical Consumer Price Index.

Combining the results of each of the four studies, the annual cost of an empty hospital bed was between \$9,000 and \$24,500 per year. On a per-day basis, these costs are between \$25 and \$67 per day.

The validity of these estimates can be checked by considering the type of costs that hospital would bear if their beds were empty. The largest portion of these costs are likely to be the interest and depreciation costs of the hospital, which it must pay whether its beds are occupied or not. One indication of the extent of these costs comes from the American Hospital Association, which possesses financial data for 5,200 short-term, community hospitals. The total annual interest and depreciation costs for these hospitals were \$20,000 (in 1991 dollars) per bed, or about \$55 per day (\$65 per day in 1993 dollars)⁴. This is about nine percent of total hospital expenses of \$650 per day (\$770 per day in 1993 dollars).

² Pauly M, Wilson P. Hospital output forecasts and the cost of empty hospital beds. *Health Services Research* 21: 403-420, 1986.

³ Center for Hospital Financial Management. *The Number and Cost of Excess Hospital Beds*. Baltimore, MD: The Johns Hopkins University, 1990.

⁴ These costs may be somewhat high in that a hospital could sell or lease its equipment and facility if it knew that it could not fill all of its beds.

These costs of an empty bed must be compared to the potential savings Medicare could realize if subacute care patients were treated at nursing homes. Across all of the DRGs considered in this report, the average per-day savings to Medicare are about \$455 per day. These savings are much greater than the costs that may be borne if fewer hospital beds are occupied. In principle, Medicare could reimburse hospitals for the costs of empty beds and still obtain substantial savings by treating patients in subacute SNFs.

Description of Studies of the Long-run Cost of an Empty Hospital Bed

Study	Period	Data Sources	Marginal Cost of Empty Hospital Bed	Remarks
Friedman and Pauly, 1981	1973-1978	Monthly reports from 870 hospitals, aggregated into quarters, from AHA's Hospital Administrative Services file	\$1,300 in 1967 dollars, or \$9,284 in 1993 dollars	The statistical cost function approach adjusts for the impact of actual and expected hospital admissions during the year. Expected admissions were estimated from a regression model.
Friedman and Pauly, 1983	1973-1978	Monthly reports from 870 hospitals, aggregated into quarters, from AHA's Hospital Administrative Services file	\$2,432 - \$3,818 in 1972 dollars, or \$13,131 - \$20,613 in 1993 dollars	This is an update to the authors' 1981 paper. The cost figures are different from their earlier work because of the incorporation of length of stay, urban/rural location, and census region as cost predictors in this paper. The cost figures in this article vary depending upon statistical methods used to account for its endogeneity. The authors favor the higher figure.
Pauly and Wilson, 1986	1979-1982	176 hospitals participating in Michigan's Blue Cross/Blue Shield program, plus discharge abstracts from the Michigan Inpatient Data Base	For full sample, \$6,904 - \$10,341 in 1982 dollars, or \$15,032 - \$22,512 in 1993 dollars.	As in Friedman and Pauly (1981, 1983), the statistical cost function adjusts for the impact of actual and expected hospital admissions. However, expected admissions were available directly from the hospitals and did not have to be generated from regression analyses. The authors note that the range of cost figures from the full sample is roughly equivalent to those in the Friedman and Pauly papers, adjusted for inflation. The ranges of the dollar figures reflect different methods to adjust for the impact of average length of stay on hospital costs.
Center for Hospital Financial Management, 1990	1987	AHA annual survey of hospitals and Medicare cost reports from 5068 short term general hospitals	\$5,800 - \$15,800 in 1987 dollars, or \$8,978 - \$24,458 in 1993 dollars.	The range of dollar figures reflects different ways of counting beds (e.g., licensed vs. staffed) and whether fixed capital costs or total capital costs are used as dependent variables in the cost function regression. The regression also adjusts for what the authors term as the "optimal occupancy rate." That rate was calculated for each hospital from a simulation analysis; it depends upon "the average time between arrivals, the average length of stay, the proportion of elective and emergent patients, the number of beds in various types of units, and the threshold number of beds beyond which no elective patients are admitted" (page 17).

Appendix D

The Short-term (Standby) Costs of
Empty Hospital Beds

The Short-term (Standby) Costs of Empty Hospital Beds

In Table 5 of the report we presented estimates of the potential savings to the Medicare program when compensating the hospital for the long-run (property) costs of incurring an empty bed. The estimate of \$70 per day (see Appendix C) used in these calculations for property costs represent only 15.3 percent of the \$455 per day that we estimated Medicare could save on an average if selected hospital inpatients were treated in subacute SNFs.

In the short-run, however, there are operating costs such as housekeeping, administration, nurse supervision, and facility maintenance that must be incurred as long as the beds remain in a standby status and before the beds are decommissioned. These costs may be thought of either as operating costs which cannot easily be avoided in the short-run or as costs necessary to keep the empty bed on a standby status in anticipation of future use. In either event, this appendix is an attempt to estimate the magnitude of these costs and to provide a very conservative estimate of the savings to the Medicare program if hospitals were to be compensated for these operating costs in addition to the compensation for the long-run property costs.

Aggregate hospital data are very difficult to obtain on a line item basis, so data from nursing facilities were used to generate a maximum estimate of what the hospital standby costs are likely to be. Standby costs in nursing facilities were estimated to be about 40 percent of total operating costs. Since nursing costs are a smaller proportion (and standby costs a larger proportion) of operating costs in nursing facilities than in hospitals, the 40 percent figure is felt to be a maximum estimate for hospitals. Applying this percentage to the operating cost portion of the basic hospital cost of \$600 per day used in the cost benefit analysis generates a hospital standby cost estimate of \$212 per day $[(\$600 - \$70) \times .4]$.

Using these assumptions regarding the magnitudes of long-run property costs and short-run operating (standby) costs, estimates of the savings to the Medicare program are presented in the following table under alternative scenarios when hospitals are fully compensated for both the long-run and short-run costs of the empty beds created when patients are transferred to subacute SNFs.

Appendix Table D-1

**Potential Medicare Savings
(\$ Billion with DRG Rebasing)
Including Payment for Both Long-run (Property)
and Short-run (Operating) Costs of Empty Hospital Beds¹**

DRG Cohort	Three-Day Rule Retained	Three-Day Rule Waived
<i>No hospitalization required</i> 5 DRGs	\$0.057 B	\$0.225 B ²
<i>3 or more days of hospitalization required</i> 53 DRGs ³	\$2.752 B	\$2.752 B
<i>2 days of hospitalization required</i> 4 DRGs	\$0.299 B	\$0.407 B
<i>Total</i> 62 DRGs	\$3.108 B	\$3.384 B

¹ This assumes short-run (operating) costs of an empty hospital bed are \$212 per day and the long-term (property) costs are \$70 per day.

² These savings will be realized with or without rebasing of the hospital DRG Medicare payments, because the hospital stay is avoided if the three-day rule is waived.

³ The savings for this DRG group are contingent entirely upon the rebasing of the hospital DRG Medicare payment and are not affected by the absence or presence of the three-day rule since all DRGs in this group require at least three days in the hospital.

Appendix E

Capital Costs to Freestanding SNFs
of Providing Subacute Care

Capital Costs to Freestanding SNFs of Providing Subacute Care

This appendix discusses the capital costs to freestanding skilled nursing facilities (SNFs) of developing the capability to provide subacute care. Freestanding SNFs can acquire a physical plant adequate to provide subacute services either by building new beds that are equipped to provide subacute care or by upgrading existing beds. Clearly, all existing beds are not good candidates for this type of upgrading, but for those beds that are, this alternative is far less expensive than building and equipping new beds.

In converting existing nursing facility beds to subacute care, freestanding SNFs will need to make extensive modifications to their physical plant and obtain new equipment. A recent estimate of the national average cost for a 40-bed conversion is \$500,000, or \$12,500 per bed.¹ This conversion cost estimate incorporates a number of components:

- expansion of common areas and therapy space;
- equipment needed to provide subacute care such as ventilators and fluidized flotation beds;
- upgrading and reconfiguring patient rooms to include piped-in oxygen, improved over-the-bed lighting, and increased space to accommodate additional equipment; and
- a separate entrance to protect the comfort and privacy of SNF residents.

As of June, 1993 there were 1.63 million certified nursing facility beds in freestanding facilities. The mean occupancy rate for these beds nationwide was 88 percent.² This leaves

¹ Chuck Gonzales, "Preparing for a New Market, " *Provider*, Vol. 20 (April 1994) 55-56.

² Figures for number of beds and mean occupancy are from the Health Care Financing Administration's Online, Survey Certification and Reporting (OSCAR) database.

about 196,000 of the certified nursing facility beds unoccupied and potentially available for conversion to subacute care.

This report has estimated that subacute SNFs could potentially provide Medicare patients with 19.6 million days of treatment. This represents about 53,700 fully occupied beds at subacute SNFs or a little more than a quarter of the certified beds that are currently unoccupied. The total of 53,700 beds is estimated by considering each of the three groupings of subacute patients identified in the report:

- those patients requiring no hospitalization before treatment at a subacute SNF who would fully occupy 2,900 beds;
- those patients requiring two days of hospitalization before treatment at a subacute SNF who would fully occupy 6,600 beds; and
- those patients requiring three or more days of hospitalization before treatment at a subacute SNF who would fully occupy 44,200 beds.

Medicare patients represent only about half of all hospital inpatient days, however, so the above estimates are likely to represent only about half of the total certified beds in freestanding facilities needed to accommodate all of the subacute patients. Therefore, freestanding SNFs could meet the total demand for subacute care by upgrading about 107,400 certified beds to subacute care.

While these estimates of bed needs represent only between 27 and 55 percent of currently unoccupied certified nursing home beds, the distribution of these unoccupied beds is likely to be very uneven across the nation. This means that while there are plenty of unoccupied beds available in total, they may not be in the "right" locations. On the other hand, because there are so many beds available in total, locations where beds are insufficient are likely to be few in number.

In any event, one also can expect some building of new beds specifically for the subacute patients (as well as some displacement of traditional post-acute patients by subacute patients)

where the bed supply is extremely tight. In these situations, post-acute patients can be shifted to other provider settings and new bed capacity created for them in order to accommodate the need for subacute beds.

Of course, no one suggests that freestanding SNFs will be called upon to provide space for all of the potential subacute care market. There are other provider types who are able and willing to provide this level of care. In addition, no one expects to have this capacity developed within the freestanding SNF industry in a single year. Nevertheless, it is instructive to examine what the capital requirements would be at this extreme, relative to current capital needs.

If it costs \$12,500 to upgrade and equip a single, certified bed to provide subacute care, the total cost of converting 53,700 beds would be about \$671 million and the cost of converting 107,400 beds to subacute care would be about \$1.34 billion. These figures can be compared to the current total annual capital outlay in the certified nursing facility industry for new beds (exclusive of bed renovations) of approximately \$1.14 billion.³ Clearly, the total capital requirements for subacute startup in the nursing facility industry is in the same ball park as current annual capital outlays for new beds.

The analysis in this appendix indicates that the existing nursing facility industry will be able to easily handle the capital needs of subacute care through the conversion of existing vacant beds. This is particularly the case to the extent that the need for subacute care focuses mainly on Medicare patients, other provider types actively compete for subacute patients, and/or the need for subacute beds develops over a period of years.

³ This assumes that the average cost of supplying a new skilled nursing bed is \$35,000 and that annual capital outlays for an existing bed are 2 percent of this total.