

Summary of Data on Economics of Fragility Fracture Program

Executive Summary

AOA was given cost and income information from four organizations including one hospital and three physician orthopaedic practices related to the costs and income potential for hospitals and orthopaedic practices that use a nurse practitioner in connection with a fragility fracture program. While the information is anecdotal pending contribution of additional data, the information provided indicates that organizations can benefit from engaging a nurse practitioner to carry out various components of a fragility fracture program. AOA has modeled examples based upon different scenarios provided by member institutions. The information below provides an excerpt of certain income-related data provided as a part of these models. The models described below are not intended to be an exchange of cost or price data, and various information elements are deleted in order to avoid sharing such data. Rather, the models are intended to assist hospitals and physician organizations in developing metrics to perform their own cost/benefit analysis of engaging a nurse practitioner.

Model 1 : Hospital Information Gained through Strategic Planning Process

One academic medical center conducted a cost/benefit analysis of its fragility fracture care program in connection with a strategic planning exercise. The musculoskeletal sector of the strategic plan has been segmented into five areas for analysis: spine, hand, fragility fractures, orthopaedics, and rheumatology.

The medical center reported that care of fragility fracture patients is a profitable business for the hospital, when measured as a profit per day of inpatient care. The fragility fracture segment was, in fact, more profitable per inpatient hospital day than any of the other musculoskeletal segments.

The medical center's analysis was focused only on acute inpatient hospitalization and did not include physician income or expenses or income related to "downstream" services such as diagnostic services or treatments performed outside of the initial hospitalization.

Model 2: Cost/Income Analysis for a Nurse Practitioner's Services in a Bone Health Program in a Medical Practice Group

AOA has received data from three (3) medical groups regarding the economic effects of engaging a nurse practitioner. There appear to be a number of variables that affect the cost/benefit analysis related to an NP's efficiency: (1) the practice's payor mix; (2) the structure of the bone health program in the practice; (3) the method of billing for the NP under the NP's own billing number vs. incident to a physician's services; and (4) variable practice costs and salary levels for NPs in the geographic area. Notwithstanding these variables, one practice with an existing program reported volumes for 2006 that supported the hiring of an NP. One practice provided pro forma projections for a new program, which appear to justify hiring an NP for a new program.

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A third group provided full profit and loss data related to an NP's services in an established bone health practice.

Example A: Physician Group A provided information related to its charges and expenses for a nurse practitioner working in a geriatric bone health program at a large academic institution.

In 2006, the nurse practitioner had 40 patient visits/consults per month (10/week or 600 per year). Thirty were new patient consultations, three patients were level 2 follow up, six patients were level 3 follow up, and one patient was a level 4 follow up. There was also a charge for 1 pharmacotherapy treatment for a Medicare patient.

This schedule resulted in the nurse practitioner generating income that covered the cost of the nurse practitioner's salary plus benefits.

Example A indicates only 40 NP visits/consults per month. This particular practice itemized direct NP practice expenses but did not show data for actual collections to offset against expenses.

- a. Concerns to note with this model include the fact that the clinical volume for the NP appeared to be too low to meet reasonable expectations. Volumes of 60-80 would appear to be necessary given the practice's payor mix.
- b. The practice did not provide information related to indirect expenses (clinic space/staff, etc.), which would be necessary for a full financial analysis.

Example B: A second physician group provided a limited pro-forma for an nurse practitioner to work in a proposed fragility fracture program in a large orthopaedic practice physician group.

Group B provided a pro-forma for a proposed program and assumed 600 new fragility fracture patients per year (or 50 per month), with each patient averaging 3 visits to the NP. This totals to 1,800 NP visits per year. Revenues are calculated based on 85% of the Medicare reimbursement for office visits and results in collections of \$92,442 per year. This is offset by total, average expense and assumed a loss based on the projected expenses.

Example C: Group C provided a full Profit & Loss for a nurse practitioner seeing outpatients in an orthopaedic practice group (not dedicated to bone health).

Group C is the only one of the three examples providing data from an established NP in an orthopaedic practice. The group reported that the NP sees outpatients only, does not do exclusively bone health consults, and has a payor mix that is more than 50% Medicaid recipients and uninsured patients. This is, however, an example of an appropriately busy NP*, with 2,045 patient visits and 2,573 wRVU. The data show that the direct and indirect costs for this NP resulted in an annual loss. The data indicated that if the NP spent more time doing inpatient hospital work, the costs could have been reduced, thus neutralizing the net loss. In addition, this practice showed a very high percentage of Medicaid/uninsured patients and income therefore would be higher in a practice with a more balanced payor mix.

Through this document, the American Orthopaedic Association is intending to help facilitate implementation of a bone health fragility fracture program by providing case studies designed to assist institutions in developing their own metrics and models.