ADVANCING RISK ADJUSTMENT FOR SCHIZOPHRENIA

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OBJECTIVE: The objective of this study was to develop and validate a series of schizophrenia specific risk adjustment cost models. METHODS: Georgia Medicaid claims data linked with institutional inpatient data for 21,602 continuous eligible persons suffering from schizophrenia was used to build a prospective diagnosis-based, a demographic-based, a drug-based, and a combined risk adjustment cost model. ICD-9-CM and drug category classifications were derived from the literature and supplemented by an expert panel. Variables were screened and cost weights were derived empirically in a random 50% training sample using a robust a weighted Heubert-White regression model and validated by expert panel review, bootstrapping methods, and assessing indices of discrimination in a 50% validation sample. Model calibration and correlations of errors with policy relevant groups were also estimated. RESULTS: Measures of discrimination (R2) varied between 16.4% for the ICD-9-CM based model to 21.8% for the combined model for trimmed total cost and varied between 4.9% to 11.3% for mental health costs in the validation sample. Risk adjustment models based on drug or ICD-9-CM information discriminated costs equally well and the combined models outperformed both drug and ICD-9-CM based models. A simple model using prior year costs combined with demographic covariates had R2s > 40% for both mental health and total costs. CONCLUSIONS: The drug and ICD-9-CM based models performed equally well and either can be used with equal confidence depending on data availability. The combined models performed better than either the ICD-9-CM or drug based models indicating that drug exposure information can compliment more traditional approaches. Health services researchers wishing to control for differences in comorbidity and severity that influence cost should always consider including prior utilization (costs) since prior year costs were vastly superior predictors of costs.

PROCESS UTILITY DERIVED FROM PROVIDING INFORMAL CARE

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OBJECTIVES: Though economics is usually outcome-oriented, it is often argued that processes matter as well. Utility is not only derived from outcomes, but also from the way this outcome is accomplished. Providing care on a voluntary basis may especially be associated with such process utility. In this paper we discuss the process utility from providing informal care. We test the hypothesis that informal caregivers derive utility not only from the outcome of informal care, i.e. that the patient is adequately cared for, but also from the process of providing informal care. METHODS: We measure process utility as the difference in utility between the current situation in which the care recipient is cared for by the caregiver and the hypothetical situation that someone else takes over the care tasks, all other things equal. We present empirical evidence of process utility on the basis of a large sample of Dutch caregivers (n = 950) and analyse these. RESULTS: Our results show that process utility exists...
and is substantial and therefore important in the context
of informal care. Almost half of the caregivers (48.2%) 
derive positive utility from informal care and on average
happiness would decline if informal care tasks were 
handed over to someone else. The multivariate analysis 
shows that process utility is significantly related to, 
amongst other things, age and gender of the caregiver. 
Male caregivers have lower process utility than female 
caregivers. Closer relationship (partner, parent, child) 
elicit lower process utility than others. CONCLUSIONS: 
Process utility is important in the context of informal care. 
Our results strengthen the idea of supporting informal care, 
but also that of keeping a close eye on the position of 
careers.

METHODOLOGICAL ISSUES—Utility Studies

CALCULATING UTILITY VALUES FROM SF-36: A COMPARISON OF DIFFERENT ALGORITHMS

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OBJECTIVES: This study aims to investigate if the results 
of four published algorithms for calculating utility values 
from assessments of SF-36 are in agreement with the 
responses of traditional efficacy variables assessed in a 
randomized clinical study with different treatments of 
asthmatic patients. METHODS: Data from a randomized 
clinical study of moderate asthmatic patients comparing 
treatment with budesonide alone (n = 114) with budes-
onide plus formoterol (n = 109) during 12 weeks are used 
in this investigation. Utility values from the four algo-
rithms are calculated for the different treatment groups 
at randomization and at end of treatment, and both 
absolute values as well as change during treatment are 
correlated with efficacy variables assessed in the study: 
PEF Morning, FEV1, and the summary score SF-36 PCS 
from the SF-36 questionnaire. RESULTS: Mean Utility 
values at baseline range between 0.61 to 0.82 for the 4 
algorithms but with no difference between the two treat-
ment groups. Change during treatment varies between 
0.08 and 0.11. While both PEF Morning and FEV1 are 
statistically significant when comparing the change during 
treatment between the two treatment groups, neither any 
of the SF-36 domains nor SF-36 PCS turns out to be. Two 
out of the four utility measures, both based on TTO, 
reaches statistical significance. Correlation for change 
during treatment shows moderate correlation with PEF 
Morning (0.28 to 0.32) and FEV1 (0.17 to 0.25). CON-
CLUSION: The two utility measures based on the SF-36 
items (or a subset thereof) and evaluated through TTO 
show better response than the other two, one evaluated 
through a Visual Analog Scale as rating scale, and the 
other based on domain values and not item values from 
SF-36.

RELATIVE WEIGHTS ASSIGNED TO DRUGS AND BIOLOGICS: OPPS METHODS AND CONCEPTS

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OBJECTIVE: The Centers for Medicare and Medicaid Services (CMS) assigns a relative weight to those high cost new technology drugs designated with a non-pass-through or expired pass-through payment status. This study examines the conceptual approach of relative weights for drugs and biologicals under the CMS Hospital Outpatient Prospective Payment System (OPPS) and compares this approach to the resource-based level of effort concept initially created for payment to physicians’ offices in the U.S. METHODS: The underlying intent of relative value units (RVUs) in the physician’s office was to create a hierarchy of resource-based level of effort involved in various types of office-based service delivery. The concept of hospital OPPS was also intended to reflect resource-based services. Thus the OPPS relative weights should be related to resource-based levels of effort. Non-pass-through high cost new technology drugs that are paid separately under OPPS are assigned a relative weight, implying that the payment includes level of effort resources. We postulate these relative weights contain no such level of effort, but instead represent only the pure drug component. This use of the relative weight concept distorts its initial intent. RESULTS: Resource-based methods initially proposed for the hospital OPPS were collected and deconstructed. CMS rationale supporting treatment of non-pass-through high cost new technology drugs paid separately under OPPS was identified. CMS drug payment computation methods were likewise deconstructed and evaluated. The evaluation sought indications of resource-based level of effort applications. CONCLU-
SIONS: Many researchers and policy makers assume that relative weights equate to level of effort resource con-
sumption in all instances. We cannot find this is so in the case of non-pass-through high cost new technology drugs paid separately under OPPS. It is necessary to draw CMS attention to this issue, as the volume of forthcoming new drugs and biologics means the issue will become increas-
ingly important.