Transforming Prior Authorization to Decision Support

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QUESTION ASKED: Would providing decision support displaying alternative acceptable treatment regimens reduce the number of denials and the cost of care for chemotherapy prior authorization?

SUMMARY ANSWER: Adding decision support to prior authorization reduced denials to 1% while reducing chemotherapy drug cost trends by 20%.

WHAT WE DID: We built and tested a digital version of the National Comprehensive Cancer Center Guidelines that offered all recommended treatment options when the physician reached a decision node.

WHAT WE FOUND: There was a 20% difference in chemotherapy drug cost trends for the pilot site in Florida compared to the rest of the nation during the trial period. Only 1% of the requests were denied because they did not meet National Comprehensive Cancer Network recommendations.

REAL-LIFE IMPLICATIONS: Prior authorization tools modified with real-time decision support reduce the number of denials and lower the total cost of chemotherapy drug treatments. The tools require clinical expertise; financial counselors who traditionally obtain authorizations may be inadequate for this new role.
Abstract

Purpose
To evaluate a computer-based prior authorization system that was designed to include and test two new concepts for physician review: (1) the tool would minimize denials by providing real-time decision support with alternative options if the original request was noncompliant, and (2) the tool would collect sufficient information to create a patient registry.

Methods
A new prior authorization tool incorporating real-time decision support was tested with a large national payer. The tool used the National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology as the content for decision making. Physicians were asked to submit the minimal amount of clinical data necessary to reach a treatment-decision node within the National Comprehensive Cancer Network Guidelines. To minimize denials, all available recommended treatments were displayed for physician consideration and immediate authorization was granted for any compliant selection.

Results
During a 1-year pilot in a Florida commercial health plan, 4,272 eligible cases were reviewed with only 42 denials. Chemotherapy drug costs for the prior authorization pilot were compared with a similar time period in the previous year for the state of Florida, as well as for the Southeast region and for the nation, which served as controls. The percentage change between the time periods was 29% in Florida, 10% for the national costs, and 11% for the Southeast region costs. The difference between the regional increase and the Florida decrease represented a savings of $5.3 million dollars for the state of Florida in 1 year.

Conclusion
There is significant opportunity to reduce the costs of therapy while being compliant with nationally accepted guidelines for cancer chemotherapy.

INTRODUCTION

Prior authorization by health care payers is a widely used method to assure that the planned medical interventions will meet the insurance plan’s criteria for coverage. Prior authorization often evokes negative reactions from physicians because the process has historically required time-consuming telephone conversations, used rules that were often not transparent, and produced a binary decision of yes or no to a request for coverage. Most oncologists believe that they understand and use the medical literature in their clinical decisions, thus negating the need for any oversight. Zitter surveyed 103 health plans and 101 medical oncology practice administrators and found that only 18% of payers report that they are able to reduce inappropriate use of chemotherapy medications with prior authorization.1
PubMed search did not reveal any published results of prior authorization for chemotherapy medications. However, studies in other specialties do show a reduction of medical costs when prior authorization is used.2

Since 2008, UnitedHealthcare, a large national payer, has used the National Comprehensive Cancer Network Drugs and Biologics Compendium (NCCN Compendium) as an alternative to a prior authorization tool. Physicians were informed that their claims for oncology drugs and biologic agents would be reviewed for compliance by matching the diagnosis and drug with the NCCN Compendium for Category I, IIA, and IIB recommendations. Free access to the Compendium was provided to all participating physicians. Physician acceptance of the program was good, but the payer noticed that approximately 7% of all chemotherapy drug claims were being denied each year. Further analysis revealed that oncology offices were requesting a preservice review of treatments for approximately 60% of planned new therapies even though this was not required. The retrospective claim review program was not meeting expectations because the denial rate was too high, causing significant economic problems for both physicians and payer. The results led UnitedHealthcare to evaluate methods to decrease the denial rate.

This article describes a computer-based prior authorization system that was designed to include and test two new concepts for physician review: (1) the tool would minimize denials by providing real-time decision support with alternative options if the original request was noncompliant, and (2) the tool would collect sufficient information to create a patient registry.

METHODS
Under a collaborative agreement, a private vendor (eviCore) built a digital version of the NCCN Guidelines for oncology drugs and biologic agents. NCCN reviewed the logic steps for each tumor guideline to ensure that the system reflected the intent of the Guidelines. The logic steps were also reviewed by the payer for the same purpose. Any differences were resolved by mutual discussion and consent among all three collaborators. To get to the correct decision node in the Guidelines, the new system required information about the tumor type, tumor stage, relevant genetic tests, drug combinations, and line of therapy. To minimize the time required to obtain an approval, the system only asked for enough information to reach a treatment-decision node in the NCCN Guidelines for the specific tumor type.

The NCCN Guidelines program continually monitors the scientific literature, major scientific meeting presentations, and new drug approvals to ensure that the Guidelines are always up to date. New findings are prioritized as urgent or nonurgent in consultation with the appropriate NCCN Guidelines Panel chair. Urgent findings result in a Guidelines panel teleconference for consideration and, if appropriate, the Guidelines are modified, posted on the NCCN Web site, and notifications are made of the change. Typically, this process takes only days to several weeks for completion of urgent updates. To assure consistency with the NCCN Guidelines, the prior authorization system has the capability to rapidly insert new questions and decision nodes as the Guidelines change to reflect new scientific evidence or drug approvals.

All NCCN-recommended regimens are displayed at the treatment node and the oncologist can select any of them. The system also offers a custom treatment plan option that allows oncologists to request a therapy that is not recommended. The oncologist could also request a custom treatment plan by listing the desired medications and the reason for the change online. Supporting articles can be submitted online or by fax. The request is reviewed by a medical oncologist used by eviCore and either followed with an authorization or a peer-to-peer discussion. Clinical trials are considered as compliant regimens.

The payer initiated a trial of the new system in Florida on June 1, 2014 for commercial and Medicaid patients in its plan. Training classes were held to orient medical oncology offices to the new system. Oncologists were granted exceptions, known as grandfathering, to continue any chemotherapy regimen already being used until their patient either completed adjuvant therapy or suffered disease progression. All new chemotherapy treatments required authorization through the system.

The payer continued the older postservice claim review using the NCCN Compendium for all other states. The chemotherapy drug costs from January 1, 2014 to September 1, 2014 were used as the baseline comparison period. During the period from June 1, 2014 to September 1, 2014, the majority of patients receiving treatment were grandfathered, but almost all of them had completed adjuvant therapy or experienced disease progression on palliative therapy by September 1, 2014. For this reason, the June to September timeframe was included in the baseline period. The chemotherapy drug costs for the January 1, 2015 to September 30, 2015 time period were compared with the baseline period using the per member per month (pmpm) costs to adjust for membership changes. The percentage difference between the two time periods is the
reported trend. This same comparison was done for the 2013 time periods compared with the 2014 time periods when all regions were using the same postservice claims review program.

RESULTS
From June 1, 2014 to June 1, 2015, there were 6,807 requests in Florida processed on the computer-based prior authorization system, and 2,533 of those requests were withdrawn or allowed to expire for administrative reasons. Of the 4,274 remaining eligible cases, 4,211 authorization requests were approved and 42 (1.0%) were denied. Oncologists obtained immediate approvals online for 2,490 cases (58%) without the need for any further interaction with the health plan. Approval was granted for 95% of the remaining cases requiring further interaction in less than 24 hours.

Three geographic regions were analyzed for commercial health plan trends: (1) the nation without Florida; (2) the Southeast without Florida, but including Georgia, North Carolina, South Carolina, Alabama, Tennessee, Kentucky, Mississippi, and Louisiana; and (3) Florida. Figure 1 shows the differences among the three groups. The chemotherapy drug cost trend for the nation increased 10% and the Southeast region increased 11%, while the Florida trend decreased 9% during the same time period when the chemotherapy online tool was operational (Fig 1). The 2013 to 2014 trend comparison shows that all three regions had similar trends while all of the regions were using the same postservice claim reviews.

The commercial member months for each region did not change significantly during these time periods. The actual pmpm cost for chemotherapy drugs in Florida was $5.88 during the measurement period in 2015. If Florida costs had increased at the national trend rate, the cost would have been $7.08 pmpm, an increase of $5,322,376 for the 3,332,990 member months in the plan.

DISCUSSION
The NCCN Guidelines are widely accepted by oncologists as a fair and reasonable standard for oncology treatments. The NCCN Guidelines Panel members come from all of the NCCN Member Institutions. The Guidelines program evaluates the quality of available evidence, and the Guidelines panels use professional consensus when the data are equivocal or insufficient. The Guidelines are updated rapidly for new discoveries and drug approvals. A key consideration for using these Guidelines was their transparency; the Guidelines are available for all physicians and patients on the NCCN Web site.

The concept design departed from traditional prior authorization. The system was intentionally built to find a solution for patients if one was available. Oncologists were shown all NCCN-recommended regimens for their patient’s specific clinical parameters at the time of the request; it was functioning as a decision-support tool. The system does not track changes in treatment selections, and it is not possible to quantify the effect of this offering on treatment decisions. However, the low denial rate of 1% suggests that an acceptable alternative was readily available.

Approximately 37% of the authorization requests were withdrawn or allowed to expire. In the Florida pilot, many physicians from other states attempted prior authorization and were told it was not necessary. There are many potential reasons for these withdrawals, including the realization that no other viable treatment options are available, duplication, change in the patient’s clinical condition, or administrative errors. The number of withdrawn cases has decreased to 24% as the program has matured and expanded nationwide.

Chemotherapy drug–trend rates vary from year to year, and they are primarily driven by the introduction of new drugs. The trend rates, as expected, were constant for all regions before the introduction of the online tool because all three regions were using the same claim review methods. The authors believe the additional review details of drug combinations and line of therapy, combined with offering an immediate NCCN-compliant alternative for the oncologist, are the key reasons for the difference in costs between Florida and the remainder of the nation.

The large difference in the cost trend between Florida and states that were not using the prior authorization tool exceeded...
initial estimates. Unlike the postservice review that used only drug and diagnosis matches, the new system also considered the specific combinations of drugs being used and the line of therapy for the new regimen. The 20% difference in cost trends resulted in an annualized estimated drug savings of $5.3 million for Florida alone, and these savings were accomplished with a low denial rate.

These findings have a significant impact on policy. The cost of all health care is rising rapidly. It is estimated that if current trends continue, the cost of an insurance premium plus out-of-pocket expenses will be equal to the average US household income by approximately 2028.3 Oncology drug costs are escalating at an even faster rate as the result of a combination of accelerated new approvals and higher unit costs. It is essential that policymakers find methods to lower other costs to offset the financial burdens of newer and often more effective treatments. This program reduced the cost of care by approximately $1.20 pmpm for every member of the Florida health plan. A sustained result such as this could fund several new drugs.

The Medicare program uses the NCCN Guidelines as one of their review criteria. The Medicare insurance program covers Category I or IIA recommendations and it uses other compendia, national coverage decisions, and local coverage decisions as supplements for its coverage decisions. The low denial rate for the prior authorization system experienced in this pilot may make the program attractive to Centers for Medicare & Medicaid Services as a possible strategy, but it would require extending coverage to Category IIB recommendations.

There are other methods for lowering the cost of oncology care. A gainsharing pilot demonstrated that five medical oncology groups were able to reduce the total cost of care for oncology patients by 34%.4 Importantly, the medical groups failed to control drug costs in that program. There was an increased drug spend of $13 million dollars compared with controls, and many of the excess costs were caused by noncompliance with NCCN Guidelines. Perhaps the synergy of combining the prior authorization tool as a process control to ensure compliance and the incentive of a gainsharing program could make oncology care more affordable and accessible. It is clear from these results that there are options to fund new treatments by eliminating the unnecessary or minimally effective treatments and reducing complications.

The online decision-support tool provides an important platform for future strategies to improve cancer therapy. The tool identifies similar cohorts of patients using the Guidelines algorithms. Each of these cohorts is further refined by an intent-to-treat declaration when the oncologist obtains authorization. The payer can then create a longitudinal record for each patient, using claims data to describe the total cost of care, the hospitalization rate, and the average duration of therapy before disease progression or toxicity for each regimen used in the patient cohort. These data will provide insight for oncologists and patients on the performance of available therapies. This comparative-effectiveness view will also reflect the responses of the everyday patient in the oncology clinic compared with patients enrolled in clinical trials for FDA registration.

In the first 6 months of the national program for this system, more than 24,000 patients have been registered; descriptive, comparative data can realistically be expected within 2 years of the program start. The data could also be used by payers and providers to negotiate performance pricing from pharmaceutical manufacturers. The data could suggest prospective phase III trials that would have the most value for future policy decisions. Although claims data are certainly imperfect, this new information will provide better insight into important trends for policymakers and clinicians alike.

This project provides evidence that it is possible to reduce the cost of cancer therapy using evidence-based decision making. Policymakers, payers, patients, and oncologists can all benefit from future strategies that divert funding from marginal therapies to more effective treatments.

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References
1. Reinke T. Plans and oncologists don’t see eye to eye on prior authorization. Manag Care 20:14-16, 2011
AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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