

Using the HEDIS Asthma Measurement

After Dr. Turk's presentation, the group discussed data collection and other aspects of the HEDIS 2000 asthma measurement.

Dr. Turk: Every year, MCOs [managed care organizations] are concerned about the workload involved in producing and submitting HEDIS [Health Employer Data Information Set] data. We have seen that more than 90% of MCOs participate, so not many are willing to opt out of the program. The point has been made at previous meetings that HEDIS compliance is a ticket of acceptance. It may not give selective advantage, but not participating probably gives selective disadvantage.

Ms. Hardin: HEDIS has both positives and negatives. The positive side is that the reporting requirements have prompted most MCOs to implement programs to improve their HEDIS performance. By doing this, MCOs are improving the quality of healthcare their members receive. The negative side of HEDIS is that it is an enormous administrative burden. Because plans are compared to each other, they are being pressured into investing significant resources into data collection through medical-record review. The cost of doing the chart reviews is enormous, so resources that could have gone into a program designed to impact outcomes are being used for data collection.

The NCQA [National Committee for Quality Assurance] has implemented a rotating reporting calendar, which will ultimately help reduce the burden. I think most MCOs believe that NCQA isn't listening adequately to their feedback on proposed measures. Little things, such as the new hypertensive measure requiring the MCO to go

through the record to confirm diagnosis, add an enormous amount of time to the data collection process. MCOs will have a better attitude towards HEDIS when NCQA takes even more steps to minimize the administrative burden of HEDIS reporting.

One other problem many MCOs have with HEDIS is the way magazines use the data. The NCQA gives this information to reporters, then the reporters come up with their own rating scale. Many MCOs have been negatively portrayed in the media, often-times unfairly so.

Dr. Miller: More states have mandates. I believe about one third of the states now mandate HEDIS as part of some type of state-employer coalition requirement. I think that's really going to help. This year, for the first time in California, we reported the data at a provider-group or medical-group level for HEDIS. So the idea of HEDIS comparing health plans is now no longer such a restrictive definition. The variation in the results still has a huge impact that is related to the capture of the data, whether it's hybrid, administrative, or something else.

In terms of this particular measure, if only 30% report the first year, we'll ask why the number is 30% and whether data-capture is really an issue. HEDIS is definitely revising the measure every year or so. The idea of casting the net wide initially and having a minimal acceptable recommendation for asthma therapy was the perfect way to go. Year-to-year comparability is important, so I'm not a

big fan of changing the measure every year, although I think the next revision of the asthma indicator will probably be tighter.

Dr. Emons: You've recognized the fact that one of the challenges for managed care has been to accurately identify the asthma population by only using administrative data. I am wondering how the new methodology for HEDIS 2000 was validated and whether the risk-stratification model was statistically validated.

Dr. Turk: We drew as much from existing data as possible. An interesting finding was that some risk-identification assumptions we favored for years didn't turn out to be statistically correct.

I do not think the risk-stratification model was statistically validated. The approach was based on group experience as to who would be high-risk or persistent asthmatics. When reviewing data that suggests hospitalization in a given year may not be a risk factor for subsequent admissions, we recognized that we were on less than stable ground. The clinical impression and practical experience guided the stratification.

In addition to accurate risk identification, several other issues can confound outcomes studies. I continue to be concerned about inaccurate reporting of diagnostic codes [*International Classification of Diseases*, Ninth Revision (ICD-9)]. Some miscoding will result from inaccurate diagnosis or carelessness. Other miscoding may stem from a patient with multiple diagnoses. A patient who is seen in the ED [emergency department] with long-standing diabetes and an acute asthmatic episode may be listed with a diabetes code rather than the appropriate asthma code.

Patients who receive acute or chronic care outside the plan may not have that encounter data captured. Also, patients who receive medications away from their plan—for exam-

ple, if they get medications outside of the United States or use medications given to other family members—may have a considerably different drug use profile than is apparent from plan data.

Patient compliance, or a better word would be adherence, is always an issue. Providers can only know for sure what has been prescribed and filled. Only the patient knows for sure how faithfully the therapeutic plan has been followed.

These are all real considerations for population outcomes studies. The most accurate outcomes studies necessitate control of individual patients and their charts as well as control of diagnostic coding, encounter capture, and medication control. These are difficult requirements for large population studies. We would like to have an outcomes study design that employs administrative data only.

Dr. Emons: We are all looking for an effective predictor model. Of the different chronic diseases, asthma should be one, especially with the pharmaceutical data, for which we would be able to develop an accurate predictor model so we could have a better idea of which asthma patients are at the highest risk now. That is almost a prerequisite for having an effective care management program.

Dr. Turk: I agree. At present, relatively little long-term study information is available on that subject.

Dr. Emons: As more health plans use the HEDIS 2000 methodology, many of them are going to be doing either written or telephonic surveys, so hopefully we'll get a better idea of the false-positive rate. In the past, that has been a major problem.

Dr. Stempel: When looking at a lot of the data analysis using administrative claims, a number of them identify asthma patients who have either pharmacy claims or medical claims.

Unfortunately, we can't identify asthma patients who never have those claims. So, most of the administrative claims are saying that the rates of asthma are 3% to 4%, whereas the population surveys are in the 6% to 7% range. The data analysis only identifies about 50% to 60% of the asthma population.

The other issue that is very intriguing is that when we try to identify high-risk patients, we are really identifying this year's high-risk patients, who are not really next year's high-risk patients. Being a high-risk patient this year is actually good, because the chance of being a high-risk patient, regardless of what happens next year, is more than half. So I don't think we should identify high-risk patients. We can identify the people who have been costly in the present year, but that is not predictive for the future year. People do not get hospitalized annually. People do not wind up in the emergency department annually. Some patients skew the curve, but we really have to do a better job of identification, and that occurs when we ask the patients to identify themselves. We have very good models in direct-to-consumer [DTC] advertising and how the market share for certain drugs can be driven by DTC [advertising]. We really don't try to do that same thing for asthma. We don't try to set the agenda for our patients as they walk in the office.

The patient's agenda is straightforward: these are the symptoms that I have, and this is what I want to get fixed during this next 7- to 15-minute time interval. The major point of the education process is to identify or educate patients regarding their expectations as they arrive in the office, find out what they want to achieve during that period of time, and really drive the issues. All of the other measurement criteria are going to follow, because these people are now identified appropriately. If this is done, the HEDIS criteria are going to be much more effective measure-

ments because the population will be identified.

HEDIS Measures Versus Guidelines

Ms. Stump: I'm concerned that with the HEDIS measures in general, and the asthma measure specifically, we are potentially losing track of why

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we're measuring in the first place, which is to understand what's going on and subsequently to act on it and to improve. I believe we'll all agree that you can't improve without measuring, which is what HEDIS began to position. However, we need to continually check ourselves on what's happening as a result of those measurement efforts, and whether we're only measuring and not improving. HEDIS started out with the goal of improvement in mind, but the improvement actions are no longer as important as the measures themselves. We need to be constantly revisiting and answering the question, "Are we accomplishing the improvement we intended by measuring?"

In terms of the difference between the guidelines and the performance measures, they actually should be interrelated. But to a great extent, including how employers and others are judging them, we look at them in isolation. We spend a lot of time and effort on the measurement issue without necessarily understanding how to implement the guidelines more successfully. Each year we have more measures at considerable expense to

the managed care industry but the outcomes are not helping consumers. Immunizations are a good example; the goal of measuring immunizations is not to boost immunization rates but to decrease vaccine-preventable illnesses.

Several years ago, the AHCPR [Agency for Health Care Policy and Research] designed a model with ischemic heart disease that had significant merit, and it fell by the wayside. They produced 3 different sets of guidelines—the same guidelines written in 3 different ways. One was for cardiologists, the second was for primary care physicians, and the third set was for consumers, or stakeholders. All constituencies had access to all 3 sets of guidelines.

If we could start thinking about those kinds of approaches for consumers and others, then linking the measurement to the approach, we might actually get some useful data. We should keep the patient in the loop.

Dr. Toggias: As a relative outsider in this field, I think that when we're presenting the guidelines, the first thing that comes to mind is, as we've been saying here, "This is nice but it's too complicated." As Dr. Miller said, most primary care physicians do know that an anti-inflammatory medication is indicated for persistent asthma. Now we have a measure that simplifies things to the very bottom line. Out of these very complicated guidelines, let's see whether we can achieve the primary goal of having these individuals take an anti-inflammatory medication. I think that is a very important step, and it goes back to what was said earlier: simplify the guidelines for the general practitioner.

One of the 3 main points for general practitioners on how to treat asthma would be that those with persistent asthma should be taking at least 1 anti-inflammatory medication. This is the HEDIS 2000 measure. I think that will give us not only a measure of what's going on, but, most

importantly, it will be the impetus for an MCO to push this and get their physicians to really go to the first step. It is a good beginning.

Using the Asthma HEDIS 2000 Measure

Dr. Turk: This measure is viewed as a beginning. As I said earlier, if we have low compliance with these criteria, then we have to strongly reevaluate our educational efforts and design a better teaching approach. We also have to consider carefully what kind of stimulus alters physician behavior. This has been the subject of much discussion at MCOs and elsewhere, and many of us have specific ideas on how behavior alteration is best accomplished.

I also remind you that the HEDIS measure has the term "controller," not "anti-inflammatory," medications in the numerator. All anti-inflammatory medications are controllers. Not all controllers are equally anti-inflammatory.

Dr. Berney: Simply measuring prescribing events fails to really address the critical situation of finding out who is showing up at hospitals and emergency departments. And who has not had a prescribing event? Why wasn't that approach conceived?

Dr. Turk: For asthma, as with other chronic diseases, patients who obtain acute or emergency care outside their group or who get medications elsewhere are not captured. I don't think we have a consistent way of approaching that problem. The second asthma measure that was considered but not adopted for HEDIS 2000 would assess the proportion of members with asthma receiving care in the emergency department.

Dr. Berney: I believe the measures review a 2-year period. A person has to be enrolled over that consecutive

2-year period. And I believe we've just heard that regression to the mean phenomenon is impossible to control. The object is to measure the performance of the health plans, which indirectly measures the performance of the doctor, which eventually indirectly measures the performance of the patient. For the patient, the events that we would consider severe should be accounted for. And if databases aren't collecting it, we should review the database again to see how to improve that. I would expect to see extremely high numbers in this overall.

Dr. Turk: One would hope that a high degree of compliance, or a high ratio, would be seen for the HEDIS 2000 asthma measure in view of the fact that theophylline and leukotriene modifiers were included as acceptable controllers in the numerator. Even for a provider using a nonpreferred therapy such as theophylline, at least we deduce that the diagnosis of asthma has been made and an attempt to address that diagnosis has been made. This is a better situation than using, for example, antibiotics for an undiagnosed chronic cough.

If we haven't by now channeled physician diagnostic approaches in the right direction, we have not done a good educational job since the first NIH [National Institutes of Health] guidelines in 1991.

Dr. Berney: In a nonperformance-driven, naive population of asthma patients, the ratio of anti-inflammatory use to β -agonist use is about 1:5, meaning that about 15% of patients are receiving anti-inflammatory medication. Is that an accepted figure?

Dr. Stoloff: The United States probably has the lowest ratio in the world, around 5%. A lot of factors are involved in obtaining those numbers, but the ratio is somewhere between 0.10 to 0.20.

Dr. Berney: So 15% is on the high end. When a population is performance driven, I believe we can hit a rate of about 40%, where the anti-inflammatory to β -agonist ratio is about 0.4. Is that correct? Can we see that?

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Dr. Toggias/Dr. Stoloff: In Holland, the country with the highest score, it's about 1.14 or 1.15.

Dr. Berney: Well, do you think we might have, as a group, created the problem by giving everyone β -agonists to get over the immediate symptoms instead of giving them anti-inflammatory medications to start with?

Dr. Turk: Yes. A very important point to transmit to the patient is the concept that the level of symptoms is not necessarily indicative of progression of the disease. That's a straightforward statement, but difficult for patients to focus on when they are relatively asymptomatic.

No matter how well informed, patients often lack follow-up compliance after they have been clinically well for weeks to months on inhaled corticosteroids. Good medical practice is involved with continuing patient education and in knowing what needs to be done in each follow up. Patient contacts reminding them of follow-up visits, disease-management program conferences, or peak flow monitoring is very much a factor in patient education. I believe that encouraging the high-risk patient to do appropriate office follow up and

peak flow measurement smoothes the clinical course significantly.

Ms. Hopper: I think that's where the usefulness of HEDIS comes in. It indicates where activities need to be implemented in order to improve health outcomes. We currently have case management services for high-risk asthma members—those at high risk for frequent emergency department visits and hospitalizations, so the asthma HEDIS 2000 measure results should be interesting.

Dr. Miller: I'm really optimistic that long-acting β -agonists and the combination of long-acting β -agonists with corticosteroids are going to change the whole consciousness. A medication is not going to provide short-acting symptom relief like that.

Dr. Emons: Asthma is such a symptom-driven chronic disease that I think the richest data is going to come from the patients rather than from claims data or from chart review. And as health-risk screenings become more convenient and more accepted through the Internet, I think that's where we're really going to be able to ask, Do the symptoms match the therapy? And how can we help improve that?

Measuring the Illness

Dr. Nathan: The only problem is that the perception of the disease still lags far behind what is actually going on. We know for a fact that a lot of asthma patients don't realize they're having problems. They have adapted their lifestyle to their disease very adequately. One of the drawbacks of the most recent guidelines is the issue of only measuring pulmonary function once or twice a year. I think that pulmonary function needs to be measured every time a patient comes into the doctor's office. Some MCOs require that a patient see a pulmonologist if

spirometry is needed, which is appropriate for the management of asthma. Measuring lung function only once a year or once every 2 years, is a major, major mistake.

Dr. Turk: Dr. Stoloff referred to the need for spirometry once or twice a year. Pulmonary function by peak flow is another consideration, which a patient can do every day. Do you think that is not sufficient?

Dr. Nathan: Yes, I think that is not sufficient. When a patient comes to my office, I want to have some objective measurement to correlate with his subjective symptoms. And there's a tremendous disconnect there. I think the biggest problem is in the way we ask patients how they are doing. If you don't ask the right questions, you're not going to get the right answers. That's why we need hard data. How would you like to take care of a patient's high blood pressure without getting a blood pressure reading at the time of the office visit?

Dr. Berney: Is β -adrenergic use a surrogate marker for severity of illness in asthmatics?

Dr. Nathan: Not necessarily. We know there are some asthmatics who are overresponders, or overreactors. They react very quickly and probably use their β -agonist when they don't need to, while other patients wait too long. On the other hand, if a patient goes through a couple of canisters a month, a better controller drug is needed.

Dr. Eisenberg: As someone who has to look at the cost of the things we're talking about, and as someone else whose purpose in life is to reduce variation, I'd like to make a plug for evidence-based medicine, specifically relative to the issue of the frequency, for instance, of pulmonary function testing. I don't think we know what the frequency of pulmonary function

testing should be. Nevertheless, I think we've got to get beyond the point where one person thinks testing should be done 12 times a year and another person thinks it should only be done 2 times a year. The concept of testing 12 times a year in the absence of good evidence that this is really going to help people control their asthma scares me when I have a population of 2 million people I'm responsible for, with a large population of asthmatics. I think we should take the next step and try to do something to find out what the frequency should be, and it should be ongoing.

Asthma Medications

Dr. Turk: Many practitioners feel that for asthma patients on appropriate and stable controller medications, the increasing use of short-acting β -agonists is an indicator of disease activity. The well-managed patient is taking a controller medication, usually an inhaled corticosteroid at a low dose, perhaps with a second controller if needed. I would like to see my patients only rarely using escape short-acting, inhaled β -agonists. If a patient is using increasing amounts of a short-acting β -agonist, the controller medication regimen probably needs to be altered, with the increasing need for short-acting β -agonists being a disease activity marker. In the future, in view of what we suspect about remodeling, perhaps we will see all patients with chronic asthma on inhaled corticosteroids. Of course, monotherapy is not sufficient for all levels of asthma severity, and that is where the art of pharmacological management comes into play.

Dr. Berney: What I'm seeing from my pharmacy databases is that someone will get an inhaled anti-inflammatory, and perhaps will only

get it once. And my big concern is, because alternate medications are available that can head off asthma disasters, why aren't the anti-inflammatory medications being used? And aren't the inhaled corticosteroids being used more than they should be? What do we tell our primary care practitioners when a patient has failed one therapy, such as an inhaled anti-inflammatory, and they should move on to another treatment? How is that being handled?

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Dr. Turk: Good question. To conclude that a patient has failed anti-inflammatory therapy, you must be certain that the correct dosage was prescribed and that the patient has complied with the regimen. This takes considerable time and effort. Also, because a patient is clinically improved after using one prescription for an inhaled corticosteroid doesn't mean that the medication should be discontinued. Unfortunately, in some practice settings, if the patient doesn't complain, a regular follow-up system is not in place. The potential always exists for patients to discontinue medications and become acutely or chronically symptomatic.

I believe that after we have the results of extended studies on the early use of inhaled corticosteroids, practitioners will have incentives to prescribe these drugs much sooner and follow up more actively. If patients are treated and educated

early and continuously, I think we will see great improvement in outcomes data and clinical status.

Expectations of the Patients

Dr. Stempel: I think that really gets back to changing the patient's expectation. Until the level of expectation is to request moving up to another step, the patients are going to want to use one inhaled corticosteroid unit per year, because that got them through their crisis, but it didn't get them to the level where they're sleeping through the night, where they're able to go out and exercise. Unfortunately, asthma is a disease that frequently has gone on for generation after generation. The patients think they are doing at least as well as their parents and grandparents did with the disease. That's a very low bar for the patient.

We talked earlier about having the pharmaceutical industry set up a fund for nonpharmaceutical-sponsored education. That fund should go to raise the bar for the patient, to educate the patient before an office visit. We should educate them not specifically as to what therapies are appropriate, but to where they should be: sleeping through the night, exercising, and not using short-acting bronchodilators with any frequency. That is really where the need and requirement is. Then we'll get the data that you want regarding the number of patients with asthma. Those numbers will show up because people will come in and say, "I'm here for my asthma. I know I've got diabetes and hypertension, but I'm here to get better asthma control." And until that happens, we're not going to have good numbers.