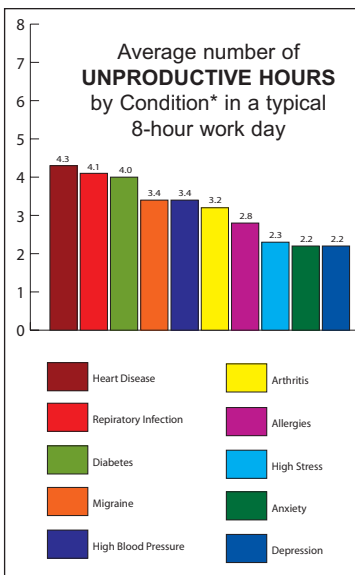




# MEDICATION THERAPY MANAGEMENT

*Are you doubling your spending?*

## IMPACT OF HEALTH ON PRODUCTIVITY



\*On days when affected by the condition. Sample size = 563. Source: Medstat. August 2006

*The most expensive medication is the one that's not used correctly.*

## WHAT IS MEDICATION THERAPY MANAGEMENT (MTM)?

Medication Therapy Management is a service where pharmacists provide an in-depth, one-on-one review of all medications (prescription, over-the-counter, herbal and nutritional) to ensure the current drug therapy is both safe and effective. A benefit to anyone taking prescription and non-prescription medications, this program is especially helpful for those with chronic medical conditions.

### PHARMACISTS CHECK FOR:

- Unnecessary Drug Therapy
- Dosage (too high/low)
- Additional Drug Therapy Needed
- Adverse Drug Reactions
- Noncompliance

## HOW WILL MTM SAVE EMPLOYERS MONEY?

Many healthcare purchasers are discovering the tremendous quality benefits and cost savings by promoting medication use that is more appropriate and effective. Medication Therapy Management allows for small problems to be caught before they turn into big problems.

*With the efficiencies pharmacists provide, patients can maintain better health and in turn have fewer hospitalizations, lower costs, increased productivity, decreased sick time and an enhanced quality of life.*

## HAVE THERE BEEN ANY RESULTS?

A program dubbed "The Asheville Project" was launched in 1997 to improve the health of city workers with diabetes. Since then, asthma, hypertension, and high cholesterol programs were added, *saving the city thousands of dollars in medical expenses.*

### INITIAL RESULTS

- Medical costs for participants with diabetes decreased by 25% on average.
- Insurance claim decreased by \$2,704 in the first year.
- Decreased number of sick days.

*Overall, despite the increase in prescription costs, direct medical costs decreased every year.*

John Maille, benefit director for the City of Asheville, stated "*Empowering patients, tapping under-utilized medical professionals such as pharmacists, and reimbursing wellness instead of illnesses is the only hope of controlling healthcare costs in the long term.*"

At the most basic level, MTM simply seeks to assure when a medication is prescribed, the problem the prescriber intended to solve is addressed in the most overall cost-effective fashion with minimal risk of adverse effects.

### THE RESULTS OF MTM:

- Improved Health Outcomes
- Enhanced Quality of Life
- Reduced Over All Costs for the Patient and Purchaser

## BACKGROUND: THE REAL COST OF MEDICATION

While most healthcare purchasers continue to focus their pharmacy benefit-related efforts around simply reducing the costs associated with drugs and their distribution, more and more innovative purchasers are beginning to discover the tremendous cost and quality benefits that can be realized from efforts aimed at promoting medication use that is more appropriate and effective.

The negative impacts that inappropriate medication use has on healthcare costs and quality are both staggering and widely unrecognized. Consider the following:

- If adverse reactions to medications were classified as a common disease, it would rank as the 5th leading cause of death in the US, ahead of deaths attributable to diabetes, Alzheimer's, kidney disease, breast cancer and AIDS.
- The direct and indirect costs resulting from inappropriate medication use were estimated to be in excess of \$177 Billion in the year 2000. This dollar amount exceeded the amount spent on the medications themselves!
- Only about 50% of prescriptions are taken as prescribed, if at all.

Fortunately, given the aging of our population and the increasing incidence of chronic conditions which require long-term management with medication regimens that are often complex and expensive, opinion leaders are beginning to shift the national debate on medications away from one focused simply on "the high and rising cost of drugs" to one focused more on "the overall value that medications can provide IF they are prescribed, used, and monitored appropriately." As a result of this new paradigm, progressive purchasers are increasingly pursuing initiatives to incorporate "Medication Therapy Management" (MTM) programs into their healthcare benefits.

## MEDICATION THERAPY MANAGEMENT

At its most basic level, MTM simply seeks to assure that when a medication is prescribed, the problem the prescriber intended to solve is addressed in the most overall cost-effective fashion with minimal risk of adverse effects. The end results of effective MTM are:

- Improved health outcomes
- Enhanced quality of life, and
- Reduced overall costs (*direct healthcare expenses and indirect costs*)

To accomplish these goals, MTM programs must facilitate the effective integration of unique medication-focused expertise into the broader expertise of the existing healthcare team. Skilled professionals who possess this unique medication-focused expertise will provide a variety of medication therapy management services which in our current healthcare delivery system, are often overlooked. These MTM services may include the following according to the individual needs of the patient:

- Interpretation and evaluation of a prescription, ongoing medication therapy, and/or a patient's stated need for treatment with a non-prescription medication or dietary supplement. Factors that are considered include:
  - The appropriateness of the medication therapy for the indication which includes the assessment of 1) the patient's

indication and treatment alternatives, 2) other concomitant medication(s) the patient may already be taking for the same indication (to screen for a potentially inappropriate therapeutic duplication), 3) the possibility that the medication was prescribed to treat an avoidable side effect of another medication, etc.

- The appropriateness of the dose/duration/route or method of therapy given factors such as accepted dosing ranges for specific indications, patient age, patient weight, patient kidney and liver function, patient adherence and acceptance of therapy, etc.
  - The potential for interactions between the therapy and other substances the patient may be exposed to such as other medications including dietary supplements and herbals, alcohol, foods, sunlight, etc.
  - The patient's allergies to the therapy or related substances.
  - Signs or symptoms of efficacy/toxicity based upon changes in patient condition, laboratory values, etc.
  - The cost-effectiveness of the therapy considering factors such as high patient out-of-pocket costs which could be a barrier to patient adherence, impact on the overall costs to the healthcare system, etc.
- Providing patient consultation, education, training, and support services designed to enhance patient understanding, and promote appropriate medication use and adherence with a patient's medication regimen. Such services could include individual or group consultation, seminars, written documentation, refill reminders, compliance packaging, advice on streamlining drug regimens to reduce pill burden, etc.
  - Providing other services or professional advice related to the patient's condition such as counseling on life style modification including diet and exercise, patient self monitoring/management, and the need for other quality of care measures (e.g. annual eye exams for diabetics), etc.

Because these MTM services require an in-depth knowledge of complex medication-related concepts such as pharmacokinetics (how medications are effected by the body), pharmacodynamics (how the body is effected by medications), and pharmacoeconomics (the relative value of various medications under given circumstances), it is clear that these services are best provided by the only healthcare professional whose training is specifically focused on these subjects: Pharmacists.

## MTM SERVICE DELIVERY MODELS

Pharmacist-delivered MTM services can be provided through a variety of strategies, but current research suggests that strategies which leverage existing patient/provider relationships and utilize face-to-face encounters deliver the best outcomes. Such strategies generally fall into one of two categories that are not mutually exclusive - those that are "pharmacy-centric" and those that are "pharmacist-centric."

Pharmacy-centric MTM programs seek to leverage the unequalled patient access of community pharmacies. It has been said that the equivalent of the entire US population visits a pharmacy every week and that patients see

their local pharmacist three times as often as they see their physician. To take advantage of this access to the greatest possible extent, services in the pharmacy-centric MTM model should be designed to "fit in" with the workflow of a dispensing pharmacy. Consequently, the interventions should be focused on an individual therapy (the one that the pharmacy would dispense) and would need to be something that could be completed in a short time-frame (approximately 10 minutes). Some of these interventions are activities that pharmacies currently do to a very minimal extent such as patient education, formulary management, allergy screening, dose verification, interaction screening, compliance management, etc. Unfortunately, over the last decade as the cost of drugs and their distribution became the primary focus of many pharmacy benefit administrators, pharmacy reimbursement models forced pharmacies to shift almost all of their attention away from these value added services onto distributing high-volumes of prescriptions as cheaply as possible. The goal with the pharmacy-centric MTM model is to realign the incentives for dispensing pharmacies so that they are able to focus less on simply getting drugs out the door as quickly and cheaply as possible, and more on ensuring that the drugs they dispense are actually being prescribed, used and monitored appropriately to elicit the desired response.

Pharmacist-centric MTM programs seek to leverage the unique, medication-related expertise of pharmacists. (No other healthcare professional receives as much training on the cost-effective, appropriate use of medications as pharmacists - in fact the entry level degree for pharmacy practice is now the Doctor of Pharmacy or PharmD). Their unique medication-related expertise allows pharmacists to take an in-depth look at complex situations which may involve one medication, several medications related to a specific condition, or all of the 5, 10, 15 or more medications a particular patient may take. Since these situations are by definition fairly complex, they generally take more time to address and consequently are not addressed through services provided as part of the dispensing process. These services may often need to be provided through appointments which would take place in a private or semi-private area which may or may not be in a pharmacy.

## DESIGN AND IMPLEMENTATION OF A MTM PROGRAM

The first step in establishing a MTM program is to determine what the program aims to accomplish by defining the particular needs it will fulfill. Some payers choose to focus on particular chronic conditions which a) have a relatively high-incidence in their population, b) are managed in large part through medication use, c) result in high medical costs when they are not effectively managed, and d) do not appear to be managed effectively. Examples of conditions that have been successfully targeted include diabetes, asthma, hypertension, and hyperlipidemia. Other payers take a more general approach, and like Medicare Part D plans, target populations of individuals who take multiple medications and have multiple chronic conditions figuring that individuals who have that many health related challenges are likely to have significant room for improvement. Regardless of the approach a payer decides to take, it must be defined early on what will constitute success for the program (e.g. what kinds of improvements in cost-of-care, quality measures, etc will be expected).

The second step in establishing a MTM program is to identify the population. This is most commonly done through an analysis of claims data. If a payer is unsure of how to access or analyze this data, they should contact their state's pharmacy association as they will likely have contacts with myriad entities that can assist them with this task. Once target population has been identified, the payer will want to assess a variety of factors including a) the size (Is it large enough to be meaningful for the payer and the prospective MTM providers? Is it "small" enough to be able to "get their arms around" and if not, is there a subset of individuals (perhaps those who are at the highest risk or who are in a certain geography) that could be targeted initially?) b) The geographic distribution (this will be of great use

when building the MTM provider network), and c) how patients will be solicited for the program and what kinds of incentives might motivate them to be active participants in the program?

The third step in establishing an MTM program is to identify the MTM provider network. The first thing to consider in this regard will be how the payer will credential (enroll) the pharmacists/pharmacies as service providers and what the credentialing requirements will entail. The second consideration is how the pharmacists/pharmacies will be expected to document and bill for their services, and at what amounts each service will be paid. Once all of these processes have been developed, prospective MTM providers will need to be solicited for participation in the MTM program and those that decide to participate will need to be oriented to the program and sign any relevant agreements. The number and location of providers needed will depend upon the types of services offered and the size of the population targeted. There are a variety of stakeholders in the pharmacy community that should be willing and able to assist payers with all of these activities - a state pharmacy association would be a good first place to start.

After the MTM services have been designed, the outcome metrics determined, the patients selected, the documentation and payment/billing processes finalized, and the providers identified and oriented, the program should be ready for implementation. It should be noted however, that simply providing sending the patients an invitation to participate with a list of MTM providers will likely not be enough to get the ball rolling, Patient incentives can definitely help but in some instances, even that may not be enough to get a patient motivated to have a productive interaction with a pharmacist. Because many patients have never experienced such an interaction, some individuals are unable to understand the value they can achieve by spending more than a couple of minutes with a pharmacist. For this reason, some patients may need extra coaxing to participate. Such encouragement can come from the payer directly, the patient's primary care provider (assuming someone has taken the time to inform the primary care providers of the program and solicit their support - which is highly recommended), the MTM pharmacist, or some other source. It should be noted that usually, the greater the case-load assigned to a pharmacist, the better their participation. Many pharmacists, especially those working in busy pharmacies, find themselves preoccupied with their existing workload. For many of these individuals, making the investment in time and effort to become a successful MTM provider will require that they are given enough patients to "make it worth their while". This should be kept in mind once the patient population has been identified and consideration is being made regarding the development of the MTM provider network.

Finally, it should not be expected that a newly launched MTM program will naturally gather increasing momentum. These kinds of services will likely be new to most of the patients and pharmacists. A shift to something as new as this will require behavior change among all parties involved. Such changes are rarely easy to implement and they can be even more difficult to sustain in the early months of a new program. Consequently, expectations should be set and arrangements should be made to deal with low and slow patient and provider participation any new MTM program. Such arrangements should include a mechanism to provide ongoing oversight and support for MTM network providers. These activities may be provided directly by the payer or more commonly by a party affiliated with the MTM network providers, or an independent network administrator under contract. Interestingly, as MTM becomes more commonplace throughout the county, increasing numbers of MTM networks are beginning to coalesce. Once again, state pharmacy associations are the best place to turn to inquire about the existence of any such networks.