



# The Pharmacist Activist

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Editorial

## Pharmacy's Vision for 2015 OR a Large Surplus of Pharmacists?

**T**he Joint Commission of Pharmacy Practitioners (JCPP) provides a forum in which the chief executive officers and chief elected officers of the national pharmacy organizations meet to discuss issues that are of importance to the profession. In late 2004 the JCPP developed the following vision statement that was endorsed the following year by all of the major pharmacy practitioner organizations;

“Pharmacists will be the health care professionals responsible for providing patient care that ensures optimal medication therapy outcomes.”

This vision statement is followed by a discussion titled, “Pharmacy Practice in 2015,” that addresses “The Foundations of Pharmacy Practice”, “How Pharmacists Will Practice”, and “How Pharmacy Practice Will Benefit Society”. The section on “How Pharmacists Will Practice” is provided below:

### **How Pharmacists will Practice.**

Pharmacists will have the authority and autonomy to manage medication therapy and will be accountable for

patients’ therapeutic outcomes. In doing so, they will communicate and collaborate with patients, care givers, health care professionals, and qualified support personnel. As experts regarding medication use, pharmacists will be responsible for:

- rational use of medications, including the measurement and assurance of medication therapy outcomes;
- promotion of wellness, health improvement, and disease prevention;
- design and oversight of safe, accurate, and timely medication distribution systems.

Working cooperatively with practitioners of other disciplines to care for patients, pharmacists will be:

- the most trusted and accessible source of medications, and related devices and supplies;
- the primary resource for unbiased information and advice regarding the safe, appropriate, and cost-effective use of medications;
- valued patient care providers whom health care systems and payers recognize as having responsibility for assuring the desired outcomes of medication use.

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I fully concur with this vision statement and its accompanying responsibilities. It is progressive and bold, and will serve individual patients, society, and the profession of pharmacy well. Nothing would please me more than to see this vision implemented in as comprehensive a manner as possible. However, I have serious concerns regarding what I consider to be the very slow pace in the progress toward implementing this vision, or even actively discussing it and establishing plans.

I recognize that the year 2015 is a goal and not a rigid deadline for implementing the vision statement. However, we are now closer to 2015 than to 2004 when the statement was developed, and it is appropriate to assess the progress that has been made and what remains to be accomplished. The profession can identify programs such as the Asheville project, an increasing number of medication therapy management (MTM) programs, the Pharmacy Practice Model Initiative, and some innovative practice opportunities as evidence of positive steps in implementing the vision. As important as these activities are, they often exist in isolation rather than as a type or standard of practice that is provided for more than a limited population. The result is that the vast majority of patients/society has no understanding or experience with the role and responsibilities articulated for pharmacists in the vision statement. Indeed, there are many pharmacists who do not feel prepared or are not otherwise eager to assume the responsibilities of the vision.

It would be expected that organizations of pharmacists, colleges of pharmacy, and pharmaceutical manufacturers would be among those having the strongest interest and commitment to having pharmacists assure optimal medication therapy outcomes. Yet, it is my impression that only a small fraction of these organizations provide a health benefit program for their employees that includes MTM and related services from pharmacists. If the organizations whose own interests are best served by the inclusion of such a benefit for their employees do not insist on this coverage, how can it be expected that other organizations and government programs

with less knowledge of the value of these services will be motivated to provide them as a benefit?

### **Whose responsibility?**

It was appropriate that the vision statement for pharmacy practice was developed by representatives of a coalition of pharmacy practitioner organizations. However, the development of the statement can be considered to be the easy part of the process. To make this vision a reality is a much more formidable challenge.

The implementation of the vision will not occur without clear direction, strategies, and plans, as well as the resources to support them and the collaboration of the other professions and organizations whose support will be necessary. It will not be accomplished by the action of one or several pharmacy organizations, or even multiple organizations working independently. The same coalition of pharmacy organizations that developed the vision statement must assume the responsibility for the planning and implementation steps that will ensure the intended outcomes. But is this discussion and collaboration occurring?

### **The need**

There is no question that there is an important need for the outcomes identified in the vision for pharmacy practice (i.e., optimal medication therapy outcomes). Pharmacists have the expertise and are strategically positioned to provide the information, counseling, monitoring, and services needed to ensure optimal drug therapy outcomes and their resultant overall contributions to the improvement of health care. There has been extensive publicity regarding drug-related problems (e.g., adverse events, drug interactions, noncompliance, medication errors) and their resultant harm to patients, as well as the billions of dollars in costs incurred to manage often-preventable problems. Patients, health professionals, and society should not continue to tolerate the current situation. But, if pharmacy will not assume the responsibility for ensuring optimal medication

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# New Drug Review

## Linagliptin (Tradjenta – Boehringer Ingelheim; Lilly)

### *Antidiabetic Agent*

**New Drug Comparison  
Rating (NDCR) = 3**

*(no or minor advantages/  
disadvantages) in a scale  
of 1 to 5, with 5 being the  
highest rating*

### Indication:

As an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

### Comparable drugs:

Sitagliptin (Januvia), saxagliptin (Onglyza).

### Advantages:

- Dosage adjustment is not necessary in patients with impaired renal function.

### Disadvantages:

- Has not been directly compared with sitagliptin or saxagliptin in clinical studies;
- Is more likely to interact with other medications (compared with sitagliptin);
- Is not available in a combination formulation with metformin.

### Most important risks/adverse events:

Risk of hypoglycemia when used in combination with a sulfonylurea or other insulin secretagogue (a lower dosage of the sulfonylurea may be required); infrequent reports of pancreatitis; action may be reduced by the concurrent use of a P-glycoprotein/CYP3A4 inducer (e.g., rifampin [use of an alternative treatment is strongly recommended]).

### Most common adverse events:

Nasopharyngitis (6%).

### Usual dosage:

5 mg once a day.

### Product:

Tablets – 5 mg.

### Comments:

Linagliptin is the third dipeptidyl peptidase-4 (DPP-4) inhibitor, joining sitagliptin and saxagliptin. By slowing the inactivation of incretins, it increases and prolongs their activity in increasing insulin biosynthesis and secretion. The effectiveness of linagliptin was demonstrated in placebo-controlled studies in which it was evaluated as monotherapy, and in combination with metformin, glimepiride, and pioglitazone (Actos). The new drug provided significant improvements in glycosylated hemoglobin (A1C), fasting plasma glucose, and two-hour postprandial glucose. When used as monotherapy, linagliptin reduced A1C by up to 0.7% compared with placebo, and by a slightly smaller increment (0.5% - 0.6%) when it was used in combination with other antidiabetic agents. It has not been directly compared with sitagliptin or saxagliptin in clinical studies.

Linagliptin is a P-glycoprotein (P-gp) substrate. Inducers of P-gp or CYP3A4 such as rifampin

therapy outcomes, others (e.g., nurse practitioners, physician assistants) will have to!

## The supply of pharmacists

Until recently there had been a shortage of pharmacists in many areas of the United States. However, during the last two years the job market for pharmacists has tightened and there is now a surplus of pharmacists in some areas. A paradoxical situation exists in which, at the same time that there has probably never been a greater need for the expertise and services of pharmacists, many pharmacists are having difficulty identifying a full-time position. This situation makes it all the more important that the profession of pharmacy be successful in implementing its vision for pharmacy practice.

If pharmacists are used to ensure optimal medication therapy outcomes to the extent such services are needed, many more pharmacists will be needed than are currently available. Indeed, there could be a shortage of pharmacists for the foreseeable future, even with the rapidly increasing number of pharmacy graduates. If, however, our profession is not successful in implementing its vision and/or health professionals other than pharmacists assume these responsibilities, the surplus of pharmacists being observed in some areas could increase precipitously with numerous ramifications. The potential for this situation must also be addressed with high priority by our profession (please also access the website [www.pharmacistactivist.com](http://www.pharmacistactivist.com) for the editorials in the August 2008 and July 2010 issues).

## Urgent action is needed

Through the JCPP the profession has identified an exceptional vision for the practice of pharmacy that is of great value for patients and society. The “match” between the need for better medication outcomes for patients and the expertise and services that can be provided by pharmacists is seemingly a perfect fit. However, the challenges to successfully implement the vision are huge and demand an unprecedented commitment and collaboration of our practitioner organizations. I want to believe that within our profession we have the will, resolve, and leadership to be successful in attaining our vision.

Daniel A. Hussar

## New Drug Review (cont.)

reduce exposure to linagliptin to subtherapeutic concentrations, and the use of an alternative to linagliptin is strongly recommended (sitagliptin is not likely to interact with other medications via pharmacokinetic mechanisms).

The absolute bioavailability of linagliptin is approximately 30%. Approximately 90% of a dose is excreted unchanged, primarily via the enterohepatic system. Only approximately 5% of a dose of linagliptin is eliminated via the urine and it is not necessary to reduce the dosage in patients with impaired renal function. This provides an advantage over both sitagliptin and saxagliptin, for which the dosage should be reduced in patients with moderate or severe renal impairment, or end-stage renal disease.

Daniel A. Hussar

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