PHARMACISTS AND PHARMACY TECHNICIANS: FACTS AND FIGURES

Current Numbers & Trends

- In 2004, there were approximately 230,000 pharmacists and 258,000 pharmacy technicians.[1]
- Between 1998 and 2004, the number of pharmacists in the workforce increased by 45,000 and the number of pharmacy technicians increased by 149,000.[2]
- By 2014, the number of pharmacists is expected to increase to 287,000 or by 24.6 percent. This projection is higher than previous projections made for 2000–2010 and demonstrates an increasing trend in job growth for pharmacists.[3]
- The number of pharmacy technicians is expected in increase to 332,000, or 107 percent in 2014. This projection is also higher than projections for 2000–2010, which had estimated 259,000 pharmacy technicians in 2010.[4]
- Overall, trends indicate that job openings created by employment growth and the need to replace workers who leave or retire will exceed the number of degrees granted in pharmacy and will continue to rise for pharmacy technicians.[5]
- Almost all states have legislated the maximum number of technicians who can work under a pharmacist at one time. In some states, technicians have assumed more medication-dispensing duties, resulting in more technicians per pharmacist. Changes in these laws could directly affect employment.[6]

Wages on the Rise

- In 2005, median annual earnings for pharmacists were $89,820. The lowest 10 percent earned less than $64,350 while the highest 10 percent earned more than $113,310. These wages demonstrate a rise from 2004, in which the median annual earnings were $84,900, the lowest 10 percent earned $61,200 and the highest 10 percent earned over $109,850.[7]
- Median annual earnings for pharmacy technicians in 2005 were $24,390. The lowest 10 percent earned less than $17,100, and the highest 10 percent earned more than $35,150. Median hourly earnings for pharmacy technicians in 2005 were $11.73, a slight increase from $11.37 in 2004.[8]
- Median earnings vary minimally for pharmacists when the specific type of employment is considered. In 2004, median earnings for pharmacists at health and professional care stores, grocery stores, general medical and surgical hospitals, department stores, and other general merchandise stores ranged from $90,620 to $87,040.[9]
- Median earnings for pharmacy technicians vary slightly between grocery stores, health and professional care stores, and other general merchandise stores (from $23,400 to $25,530) and rise to $28,310 for those employed by general medical and surgical hospitals.[10] Earnings can also vary for certified technicians and for the different shifts.

Employment

- As of 2004, about 61 percent of pharmacists work in community pharmacies that are either independently owned or part of a larger chain, store, or merchandiser. The majority of these pharmacists are salaried, though some are self-employed owners. Of the salaried pharmacists, about 24 percent work in hospitals, while others work in clinics, mail-order pharmacies, wholesalers, home health care agencies, or the Federal Government.[11]

- In 2004, about 70 percent of pharmacy technician jobs were in retail pharmacies, either independently owned or part of a drugstore chain, grocery store, department store, or mass retailer. About 20 percent were in hospitals and a small proportion were in mail-order and Internet pharmacies, clinics, pharmaceutical wholesalers, and the Federal Government.[12]

- About 21 percent of pharmacists worked part-time in 2004. Most full-time salaried pharmacists worked approximately 40 hours a week and some, including many self-employed pharmacists, worked more than 50 hours a week.[13]

- Technicians work similar hours, though as their seniority increases, technicians often acquire increased control over the hours they work. In both retail and hospital settings many technicians work part-time.[14]

Women and (Low) Minority Presence

In 2005, 48.3 percent of pharmacists were women.[15]

Fifty-five percent of full-time chain pharmacists are male while 58 percent of part-time chain pharmacists are female.[16]

The pharmacist workforce is 6.3 percent Black or African American, 10.4 percent Asian, and 5.5 percent Hispanic or Latino.[17]

In Schools:

The pharmacy student enrollment in fall 2003 was:

- 58.4 percent white
- 9.7 percent Black or African American
- 3.7 percent Hispanic or Latino
- 20.9 percent Asian, Hawaiian or Other Pacific Islander
- 0.4 percent Native Americans or Alaska Native
- 4.7 percent Other/Unknown
- 2.2 percent Foreign[18]

Compared to our nation's population and despite growth over the last 15 years, underrepresented minority enrollment remains low at U.S. colleges and schools of pharmacy. Minority enrollment increased from 12 percent in 1997 to 14 percent in 2003, but of that 14 percent, 42 percent were enrolled in the five historically black institutions, and the University of Puerto Rico. Female enrollment in pharmacy programs in fall 2003 was at 67 percent. Twenty-one percent of enrollees are Asian, Native Hawaiian or other Pacific Islander descent.[19]

Outlook

Numerous employment opportunities for pharmacists are expected for the 2004–2014 period. Because of this, enrollments in pharmacy programs are rising. Despite increases, job openings should still outnumber job seekers. Several factors contribute to the rise in employment:

- The population of middle aged and elderly people, the biggest users of prescription drugs, is increasing.[20]
- Scientific research and development yields more prescription drug products. Specifically, new developments in genome research, medication distribution systems, and product marketing increase consumer demand for products and services.[21]
- Under Medicare Part D, prescription drug coverage by a greater number of health insurance plans has increased.
- Pharmacy technicians will perform more of the pharmacists' tasks.

Worker Shortages Cloud Outlook

While there are opportunities for pharmacists and pharmacy technicians, the heavy demand appears to be creating worker shortages. Evidence includes increased vacancy rates, difficulties in hiring, and increases in the volume and range of activities demanded of pharmacists.[22]

Several factors contribute to the shortages, such as the increased use of prescription medications, market growth and competition among retail pharmacies, the increased number of health care providers who prescribe medication, and the increase in insurance coverage for prescription drugs.[23]

Shortages have several negative impacts for the industry and the public.

- Job stress, satisfaction, and poor working conditions due to longer hours lead to a greater potential for medication errors.
- Pharmacists have less time for patient counseling, which is especially important as prescription drug plans and complex medications rise.
- Service restrictions could affect underserved or vulnerable people, such as the elderly, residents in rural areas, the mentally ill, or those who rely on publicly-supported services such as Native Americans and veterans.
- More pharmacy practice faculty is recruited from academia which limits schools' ability to increase class size.[24]

Shortages Significantly Affect Pharmacy School Faculty and Graduates

With the need to replace retiring pharmacists and others leaving the workforce, it is unlikely that the current pace of professional degrees awarded—nearly 7,500 in 2002–2003—is sufficient to replace the projected demand.[25]

In addition, schools foresee upcoming challenges of worker shortages in that:

- Forty-five percent of deans are 60 years or older and 21 percent of other full-time faculty are 60 years or older.
- Seventeen percent of vacant positions are due to retirements.
- In 2003, there were 354 vacant positions or a 12 percent vacancy rate. In the industry overall, there were 4,024 open pharmacy positions as of July 2004.[26]
- Twenty-three percent of the vacant positions were due to faculty moving to another college or school of pharmacy and 51 percent of vacant positions remained vacant due to an insufficient number of applicants in the pool.[27]

Outsourcing and Technology May Change Pharmacists' Role

Hospitals and retail pharmacies outsource tasks to combat industry shortages and to drive costs down. Recently, CVS outsourced its human resource departments in Rhode Island to IBM in Bangalore, India. The move caused 140 workers to lose their jobs.[28]

Online Drugstores:

Prescriptions can be outsourced, which happens because health care organizations promote the use of lower cost prescription drugs distributors. Pharmacists are most affected by online pharmacies and mail-order services. A report by Columbia University estimated that there are at least 400 existing online pharmacies.[29] Retail chains such as CVS and Walmart have websites that function as virtual pharmacists. The rise in online pharmacies could hinder job growth for pharmacists and pharmacy technicians.

Pharmacist Robots:

New technologies are starting to make the pharmacist more "outsourceable." Pharmacists in institutions can now view actual orders that are scanned directly from the order sheets without leaving home. Similarly, they can review patient's drug regimens, laboratory data, nursing notes, radiology reports and other critical patient data from any secure, networked computer anywhere. New technology is being used today in many high volume order fulfillment pharmacy operations. One example, the four-way, split-screen monitor, shows the image of the actual medication in the vial, alongside a depiction of what the medication should look like if filled correctly and the image of the original prescription alongside the label as printed.[30]

Many hospital pharmacies already use machines to count and sort pills. In Washington, Evergreen Hospital Medical Center pharmacists estimate up to 93 percent of the hospital's drugs are now dispensed by Ernie, a $3 million robot that has packaged nearly 400,000 doses in the past nine months.[31] Manufacturers such as AutoMed in Illinois and McKesson in San Francisco, produce pharmacy robots capable of processing up to 40,000 prescriptions a day. The units are in use in hundreds of hospitals and drugstores.[32] Within the next few years, hospitals will also have the option to use machines that prepare IV syringes and bags, and other sterile compounds. Robotic IV Automation, or RIVA, performs these tasks and is expected to be released for commercial purposes in 2007.[33]

Chain pharmacies such as Safeway, Inc., recently received state approval for pharmacy robot kiosks that automatically dispense refilled prescriptions. State approval is pending for Walgreen's and White Cross Pharmacy in San Diego.[34] These machines hold the previously-filled prescriptions and enable the customer to retrieve their order and pay via credit card. While companies claim that this new form of technology enables pharmacists to have more time to advise customers, some pharmacists fear that they may lose their jobs to machines.

Medicare Part D Causes Minor Troubles for Independent Pharmacies

Independent pharmacies make approximately $84 billion a year. Ninety-two percent of their sales are prescriptions, and they sell 42 percent of all nationwide prescriptions.[35] While Independents often join consortiums with one another to buy cheaper supplies, they are challenged by larger retail pharmacies. Since the implementation of Medicare Part D, intensified price competition from chain pharmacies and delayed reimbursements cause problems for the independent pharmacies.[36] Furthermore, "dual-eligibles"—those who qualify for Medicare and Part D plans—also create more work for the already-stressed local pharmacists.

Unionization

In 1995, 7.4 percent of the 151,982 pharmacists were union members. Since then, union membership has varied as the number of pharmacists has increased. In 1999, when there were 190,426 pharmacists, 11.3 percent of them were union members. Then, in 2002, the sudden increase to 209,512 pharmacists drove union participation down to 5.4 percent. More recently in 2005, with 234,884 workers, 8 percent are union members. While some of the fluctuations are related to the rising numbers of workers, the ratio from 2005 demonstrates that more pharmacists are union members now than in 1995.[37]

In 2004, pharmacists in unions earned an average of $30.60 per hour.[38] Income is not the only factor encouraging union membership among pharmacists. Growing insecurity, deskilling, speedups requiring prescriptions to be filled at record levels, outsourcing, and changes in technology, and decreasing job satisfaction are prompting pharmacists and pharmacy technicians to turn to the collective power of unions for support.

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For further information on professional workers, check out DPE's Web site: www.dpeaflcio.org.

The Department for Professional Employees, AFL-CIO (DPE) comprises 23 AFL-CIO unions representing over four million people working in professional, technical and administrative support occupations. DPE-affiliated unions represent: teachers, college professors and school administrators; library workers; nurses, doctors and other health care professionals; engineers, scientists and IT workers; journalists and writers, broadcast technicians and communications specialists; performing and visual artists; professional athletes; professional firefighters; psychologists, social workers and many others. DPE was chartered by the AFL-CIO in 1977 in recognition of the rapidly-growing professional and technical occupations.

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