Pharmacist Workforce

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Practice Capacity
Pharmacy Degrees Conferred as First Professional Degree (1965 – 2016)

Source: 2015-2016 Profile of Pharmacy Students - AACP
Proportion of U.S. Pharmacists by Segment in Descending Size
(2009 data in lighter tone and 2014 data in darker tone)
Observations

• The proportion of pharmacists in the five segments did not differ significantly between 2009 and 2014.

• There remains a need for, and a segment of, pharmacists devoted to specialty practices, dispensing, and patient care services which are delivered at the point-of-care.
Observations

• It appears that increases in the number of pharmacy school graduates per year has helped the pharmacy profession replace workforce exits by “capitation era” pharmacists and meet medication provider needs while, at the same time, expand capacity for new roles in patient care.
Questions for the Future

• Profound transformations are taking place at the fringes of pharmacy practice (specialty pharmacy, non-pharmacy work settings, integrated systems, etc.). At what rate will future change take place?

• Will pharmacy technicians evolve into “pharmacist assistants” and require bachelors-level training?
Questions for the Future

• There is a call for PharmD trained pharmacists globally. Will US-trained PharmDs fill this need in the future?

• How quickly will residency training evolve? Will more pharmacist positions make residency training requisite for employment?
Questions for the Future

How quickly will transformations take place in:

• Contemporizing pharmacy practice acts and other statutes in light of pharmacists’ new roles

• Payments that are commensurate with cost-of-provision and resultant value

• Formalizing pharmacist-to-pharmacist referrals so that pharmacists working in different systems can have complete information and can collaborate

• Coordinating segments of health care so that patients view them as seamless, patient-centered, and non-duplicative.
Places to Practice
Market Dynamics of Community Pharmacies in Minnesota 1992-2017

Reported as % of all community pharmacies
Market Dynamics of Community Pharmacies in Minnesota 1992-2017

Reported as % of all community pharmacies
The Face of Community Pharmacies in Minnesota, 1992

- Single Entity, Retail (independently owned) 45%
- Small Chain, Retail (independently owned, 2-10 locations) 15%
- State/Regional Chain, Retail (Drug Emporium, Snyder, Thrifty White) 12%
- National Chain, Mass Merchandiser (Kmart, Target, Walmart) 10%

Source: Schommer et al., Working Paper, 2012
The Face of Community Pharmacies in Minnesota, 2002

- Single Entity, Retail (independently owned) 28%
- National Chain, Mass Merchandiser (Kmart, Target, Walmart) 14%
- State/Regional Chain, Supermarket (Coborns, Cub, HyVee, etc) 13%
- Small Chain, Retail (independently owned, 2-10 locations) 10%
- State/Regional Chain, Retail (Drug Emporium, Snyder, Thrifty White) 10%
- National Chain, Retail (Walgreens) 8%

Source: Schommer et al., Working Paper, 2012
The Face of Community Pharmacies in Minnesota, 2012

- Single Entity, Retail (independently owned) 18%
- National Chain, Retail (Walgreens, CVS) 18%
- National Chain, Mass Merchandiser (Costco, Target, Walmart) 16%
- State/Regional Chain, Supermarket (Coborn's, Cub, Lunds, etc) 14%
- Small Chain, Retail (independently owned, 2-10 locations) 8%
- State/Regional Chain, Clin/MedCtr (Essentia, Fairview, Mayo, etc) 8%
- State/Regional Chain, Retail (Drug Emporium, Snyder, Thrifty White) --

Source: Schommer et al., Working Paper, 2012
The Face of Community Pharmacies in Minnesota, 2017

- National Chain, Retail (Walgreens, CVS) 28%
- State/Regional Chain, Clin/MedCtr (Essentia, Fairview, Mayo) 20%
- State/Regional Chain, Supermarket (Coborns, Cub, Lunds) 14%
- Single Entity, Retail (independently owned) 12%
- National Chain, Mass Merchandiser (Costco, Walmart) 12%
- Small Chain, Retail (independently owned, 2-10 locations) 9%
- State/Regional Chain, Retail (Thrifty White) 5%
Practice Economics
Pharmacist Annual Salaries in Minnesota

1999: $70,493
2001: $86,690
2003: $98,160
2005: $105,487
2007: $113,806
2009: $119,776
2011: $123,975
2013: $129,029
2015: $134,593
2017: $135,894
Pharmacist Starting Annual Salaries in Minnesota

<table>
<thead>
<tr>
<th>Year</th>
<th>Salary</th>
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<tbody>
<tr>
<td>2000</td>
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<td>2014</td>
<td>120,436</td>
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<td>2016</td>
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Product Provision Era (1940-1965)  
“Product”
“Practice Model”
Medication Experience Era (2016-2040) “Patient Care”
Medication Experience can be a Unifying Element for Healthcare

• Over 500 million times a day in the United States, individuals make the decision to take or not to take a prescription medication.

• Far outpaces pharmacy visits (6 million), physician office visits (2.6 million), and hospital discharges (108,041) per day.
Medication Experience

• The use of medications by patients is likely to be the only treatment modality with which patients interact on a daily basis.

• Patients’ daily interaction with medications creates a physical and emotional bond called the “medication experience” and can serve as a unifying element to help coordinate patients’ health care services.
Medication Experience

The sum of all the events in an individual’s life that involve medication use including attitudes, motivations, and environments in which medication-related decisions are made and behaviors are enacted.

The only interface between the individual as a person and the individual as a patient on a daily basis.
Practice Change
Transformation in Community-Based Pharmacy

**Current**
- Connecting products with customers
- Success measured by number of prescriptions
- Space organized to display and sell products
- Inventory generates revenue

**New**
- Connecting practitioners with patients
- Success measured by patient outcomes
- Space organized for patients to receive services
- Patient care generates revenue

New Strategies for Community-Based Pharmacy

- **Communicate** with patients so that they see the pharmacy as a partner in their care.

- **Customize** services and messages so that patients feel unique and valued.

- **Collaborate** with patients so that they actually design and participate in service delivery (value co-creation).

- **Clairvoyance** to anticipate patients’ needs so that proper attention can be given at just the right time.

Collaboration Theory for Establishing Pathways for Access to Pharmacist-Provided Patient Care

- Collaborative Performance Systems
- Information Sharing
- Decision Synchronization
- Incentive Alignment
- Integrated Processes

Community Pharmacies as “Health and Personal Care Centers”

Community pharmacies are not convenience stores that happen to sell prescription drugs, but rather are “organized by their capacity to operate as health care access points that provide patient care and public health services.”

Community Pharmacies as Integral to the Overall Health System

Community pharmacies are being integrated into larger organizations to provide services at lower cost, provide access, leverage data, combine medication and medical costs into risk portfolios, and meet pay-for-performance goals.

Topics for Discussion

- Communicate with patients so that they see the pharmacy as a partner in their care.
- Customize services and messages so that patients feel unique and valued.
- Collaborate with patients so that they design service delivery (value co-creation).
- Clairvoyance to anticipate needs so proper attention can be given at just the right time.

- Connecting practitioners with patients
- Success measured by patient outcomes
- Space organized for patients to receive services
- Patient care generates revenue

- Collaborative Performance Systems
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