

Analysis of 2016-17 PharmD Industry Fellowships

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Introduction:

Pharmaceutical companies continue to fill their talent pipelines with pharmacists as they recognize that PharmDs are among the best-equipped professionals to contribute to the development, commercialization, promotion, and optimal use of medicines. Of the 10,000 pharmacists currently employed in the US pharmaceutical industry, about 20% have completed a PharmD Industry Fellowship¹. Currently, more than 50 companies train PharmDs through Post-Doctoral Fellowship Programs. The number of PharmDs participating in fellowships has grown significantly over the past decade and is fast approaching 400 fellows per year.

PharmD Industry Fellowships are designed to train PharmDs to become proficient in certain functional areas in industry under the mentorship of experienced preceptors. For PharmDs, pharmaceutical industry jobs represent a professionally rewarding opportunity to apply their scientific training, medication expertise, and clinical acumen to impact patient care on a global scale.

The objectives of this annual report from the Industry Pharmacists Organization (IPhO) are to describe i) characteristics of current 2016-17 fellowship programs, and ii) emerging trends in PharmD Industry Fellowships based on 3-year longitudinal data. This valuable report is designed to increase awareness among all fellowship program stakeholders, including students interested in industry, current fellows, fellowship program administrators, and fellowship preceptors and leaders at sponsor companies.

Methods:

The Industry Pharmacists Organization (IPhO) maintains a comprehensive, proprietary database of all PharmD fellows currently participating in PharmD Industry Fellowship Programs. Data is obtained from a variety of publicly available sources, and combined with information proprietary to IPhO.

The following data fields were utilized and evaluated:

1. Fellowship Department (Functional Area)
2. Fellowship Sponsor Company
3. Fellowship Program Affiliation
4. Fellowship Program Duration
5. Fellow Alma Mater

Data from the 2016-17 analysis were compared with results from similar analyses in previous years (2014-15 and 2015-16^{2,3}) to produce 3-year trends.

Results and Discussion:

Results are described in the following areas:

A. Characterization of PharmD Fellows in 2016-17 Industry Fellowship Programs

1. Fellowship Department (Functional Area)
2. Fellowship Sponsor Company
3. Fellowship Program Affiliation
4. Fellowship Program Duration
5. Fellow Alma Mater

B. Three-Year Trends in Fellowship Positions

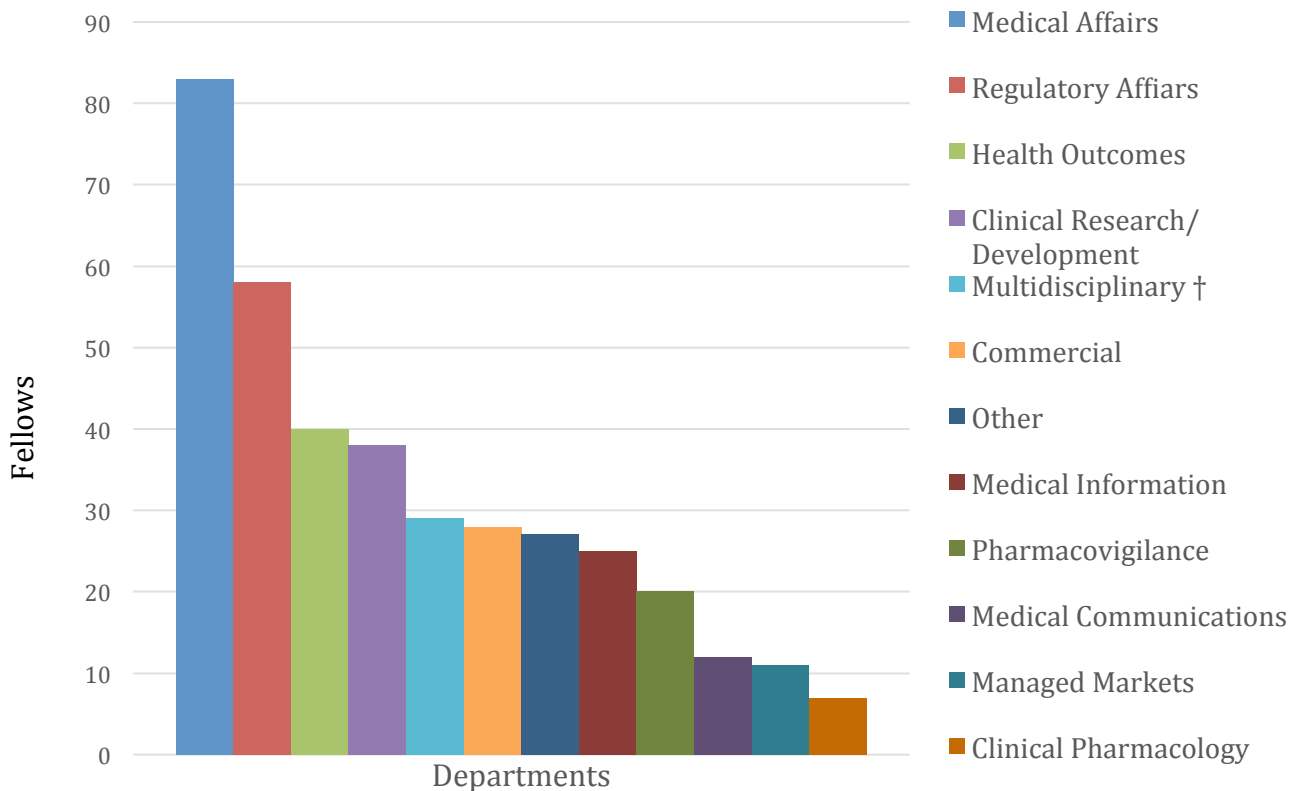
1. Three-Year Trends in Number of Fellowship Positions
2. Three-Year Trends in Fellowship Department (Functional Area)
3. Three-Year Trends in Fellowship Sponsor Company

Characterization of PharmD Fellows in 2016-17 Industry Fellowship Programs

1. Fellowship Department (Functional Area)

The top fellowship departments in 2016-17 were Medical Affairs (n=83), Regulatory Affairs (n=58), Health Outcomes (n=40), and Clinical Research/Development (n=38). There was a substantial increase in the number of fellowships in many of the functional areas during 2016-17. In addition, many fellows are gaining experience in more than one functional area through multidisciplinary fellowships.

Figure 1: Fellowship Department/Functional Area (n=378 Fellows)

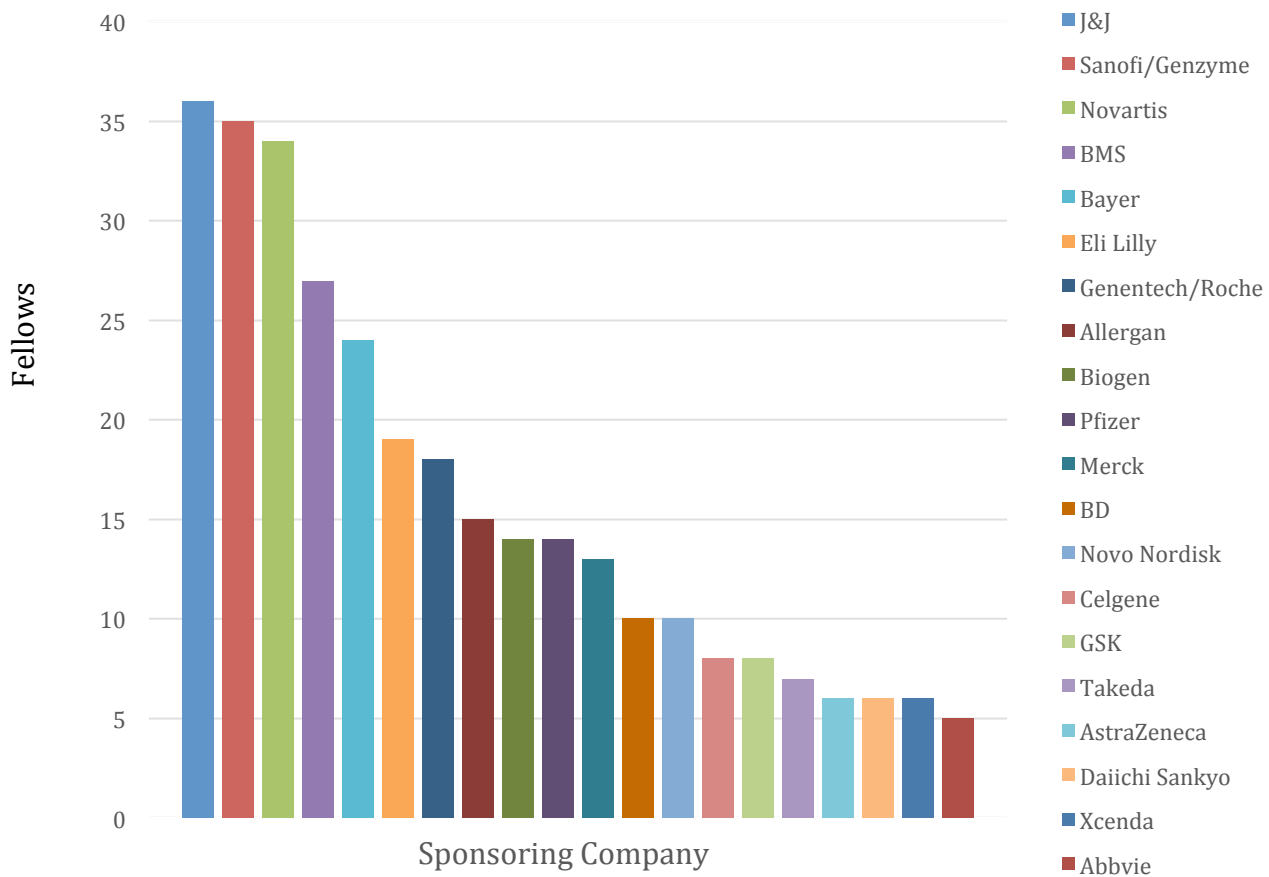


†“Multidisciplinary” includes fellows who gain experience in more than one department during their fellowship.

2. Fellowship Sponsor Company

Of the 50+ companies hosting fellowships, the top five companies were J&J (n=36), Sanofi/Genzyme (n=35), Novartis (n=34), BMS (27), and Bayer (n=24). These companies have been hosting fellows for many years, and have increased the number of offerings during that time.

Figure 2: Fellowship Sponsor Companies*

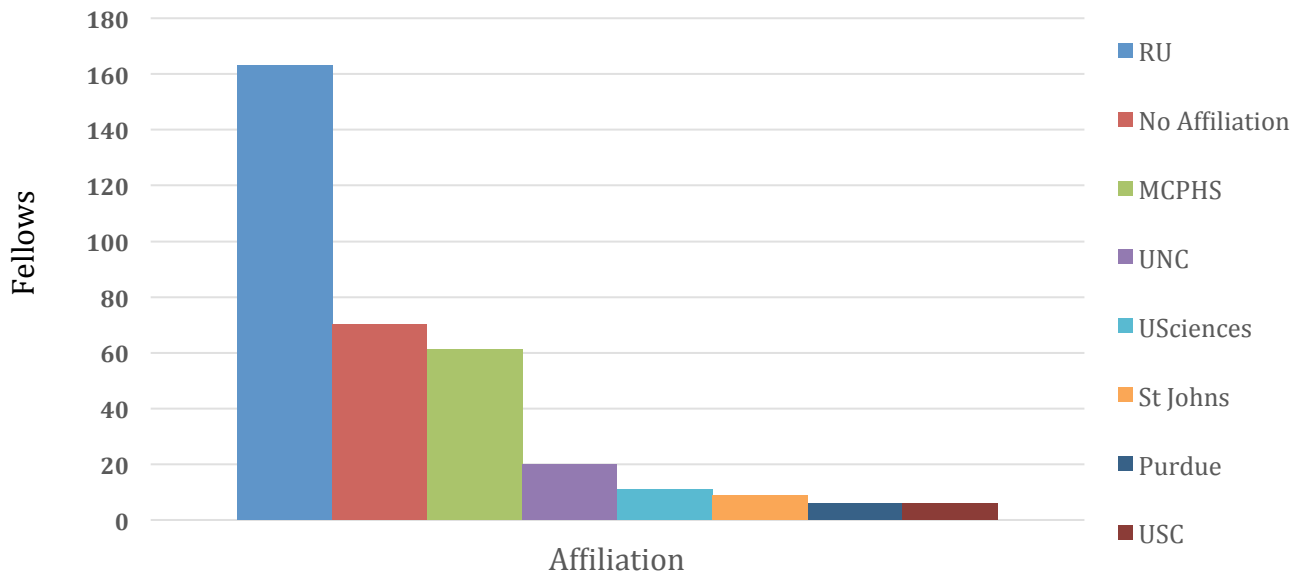


* The following sponsor companies were combined: Sanofi and Genzyme; Johnson & Johnson, McNeil and Janssen; Roche and Genentech; Abbreviations: BMS= Bristol Myers Squibb; GSK= GlaxoSmithKline; BD= Becton Dickinson; J&J = Johnson & Johnson.

3. Fellowship Program Affiliation

Overall, 82% of Fellowship positions were offered through collaborations between two or more entities. The vast majority of positions offered through academic partners were: Rutgers University (RU) (n=161) and MCPHS University (n=61). Together, the two employ nearly 60% of all current fellows. There was considerable growth in all program types in 2016-17 vs. 2015-16, including both affiliated and non-affiliated fellowships.

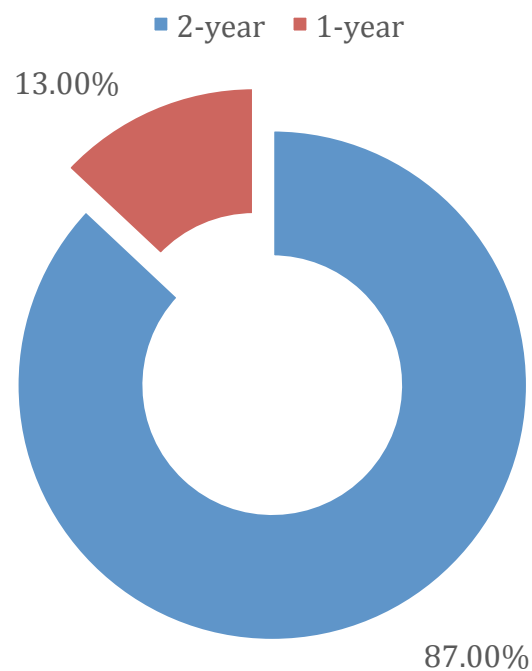
Figure 3: Fellowship Programs with an Academic or Non-Academic Affiliation (n= 378 Fellows)



4. Fellowship Program Duration

The great majority (87%) of fellowship positions are two years in duration. The rest are one year in duration, with the exception of one fellowship program, which offers a six-month position. For many of the popular functional areas, two years of experience is necessary for a fellow to gain the experience necessary to land the type of position he or she is seeking at the conclusion of the program.

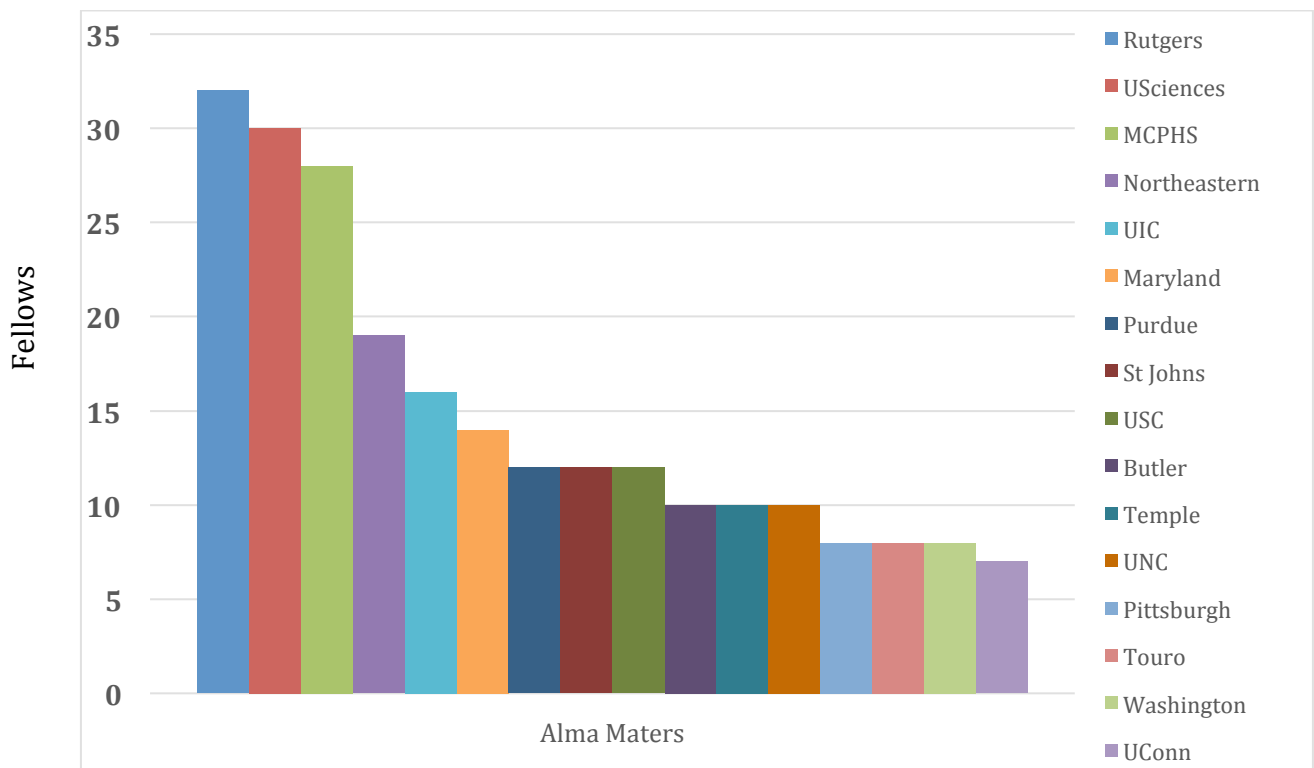
Figure 4: Fellowship Program Duration (n= 375 Fellows)



5. Fellows' Alma Mater

In 2016-17, 70 different pharmacy school alma maters were represented among the 378 fellows. The most common alma mater was Rutgers University (n=32), followed by University of the Sciences in Philadelphia (n=30), MCPHS University (n=28), Northeastern (n=18), and UIC (n=16).

Figure 5: Fellows' Alma Mater (n= 376 Fellows)



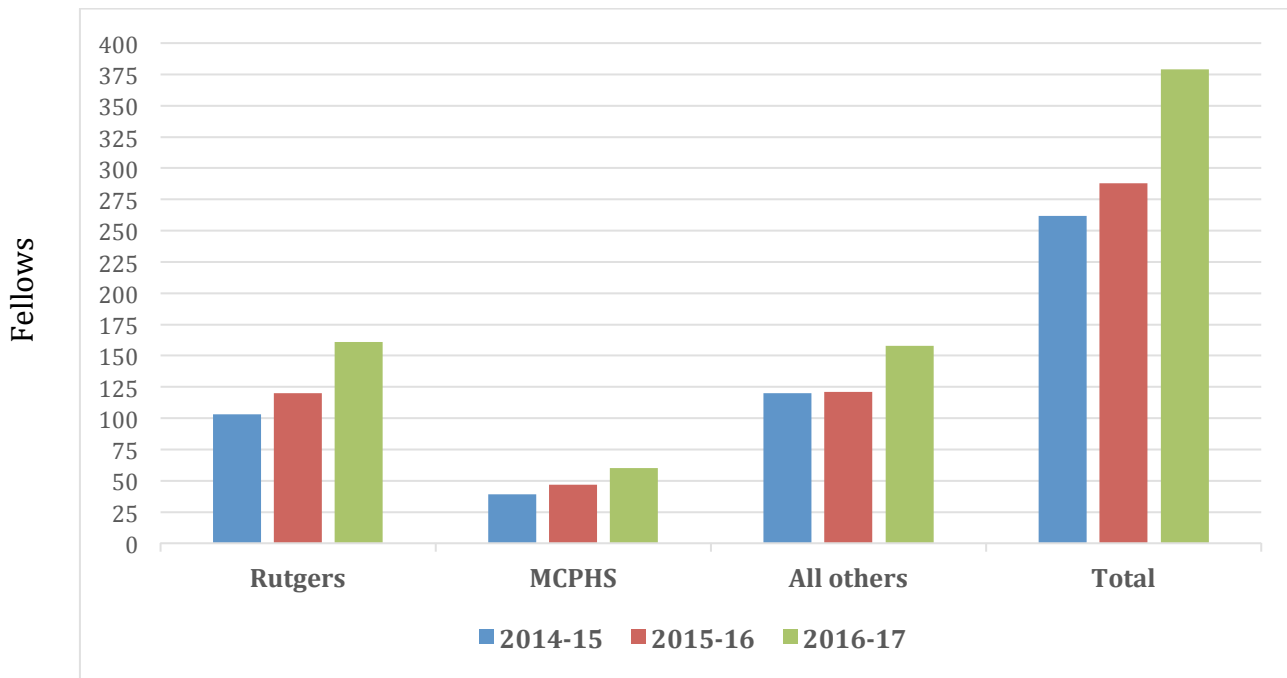
Three-Year Trends in Fellowship Positions

IPhO has been collecting and reporting data about industry fellowships and fellows annually for the past three years, making it possible to report trended data on key program metrics. Comparing 2016-17 data with results of substantially similar analyses from with 2014-15 and 2015-16^(2,3) produced three-year trended data depicted below.

1. Three-Year Trends in Number of Fellowship Positions

Overall, the number of fellowship positions offered grew by +32% from 2015-16 to 2016-17. Similar growth rates were observed in each of the three key market segments (Rutgers, MCPHS, and All Others). In 2015-16 vs. 2014-15, the number of positions grew by just +10%.

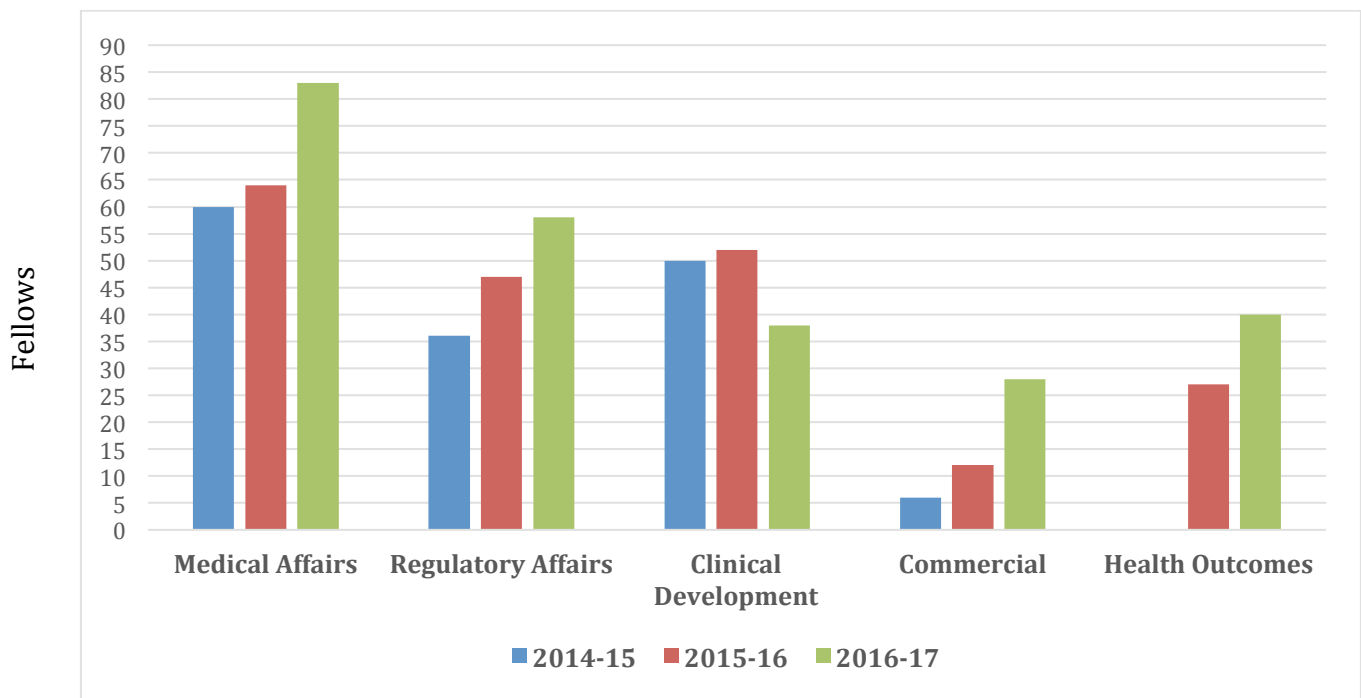
Figure 6: 3-Year Trend in Fellowship Positions Offered by Various Programs (n= 378 Fellows)



2. Three-Year Trends in Fellowship Department (Functional Area)

There has been continued growth in Medical Affairs and Regulatory fellowship positions over the past three years. There have been relatively few commercially focused fellowship positions; however growth in this area is accelerating with the advent of Market Access and other commercial functions. The number of commercial positions has doubled in each of the last two years. The year-on-year increase in HEOR-focused positions is also an encouraging area of growth. Meanwhile, the number of Clinical Research/Development fellowship positions declined in 2016-17.

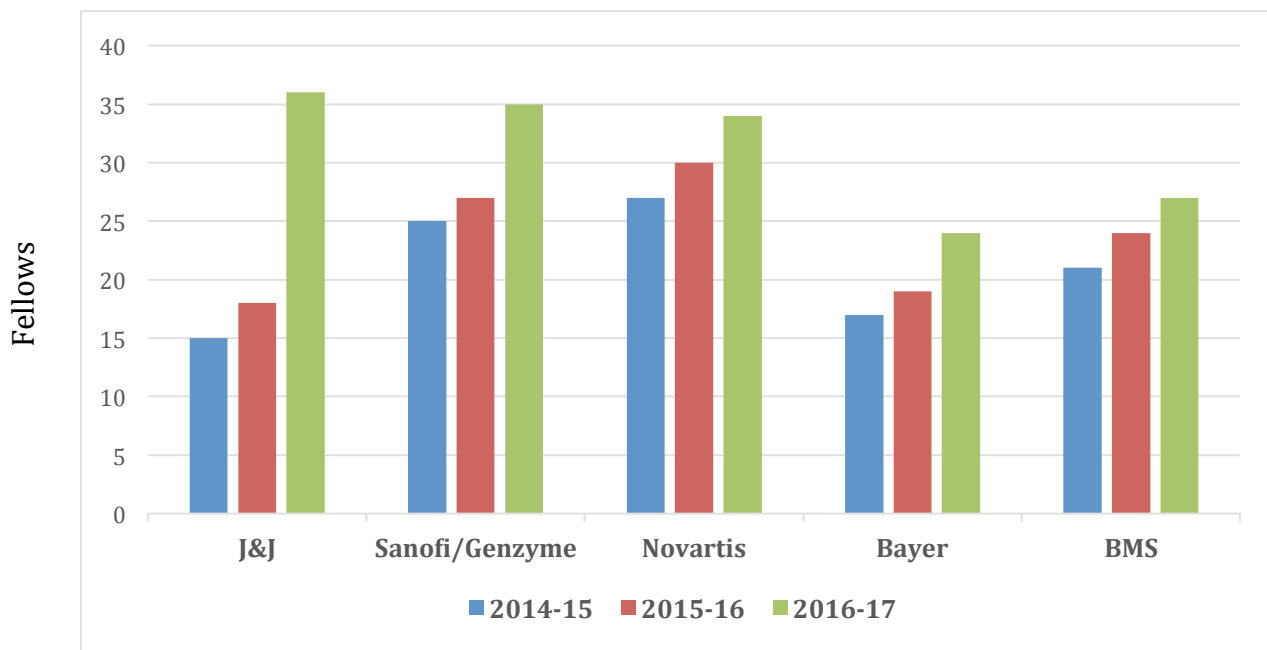
Figure 7: 3-Year Trend in Fellowship Positions, by Functional Area (n= 378 Fellows)



3. Three-Year Trends in Fellowship Sponsor Company

Many employers who have well-established fellowship programs continue to add more positions. The number of positions offered through the J&J family of companies has doubled in the last two years, from 18 fellowship positions to 36. Several of these companies offer positions with two or more academic partners and/or also offer positions that are not affiliated.

Figure 8: 3-Year Trend in Fellowship Positions Offered Through Various Sponsor Companies (n= 378 Fellows)



Limitations:

Fellowship Departments/Functional Areas (Figures 1 and 7) were grouped by the authors according to their determination of best fit, since departmental nomenclature varies widely among companies. The definition of “best fit” has been modified slightly from year to year.

Conclusions:

This third annual report provides all fellowship program stakeholders, and student pharmacists with an interest in applying for fellowship positions, with a better understanding of the current and trending landscape of PharmD Industry Fellowships.

Key conclusions include:

- Employers continue to recognize the value that PharmD Fellowships add to their talent acquisition and development strategies. As a result, PharmD Industry Fellowship Programs continue to proliferate. This growth is coming from both well-established programs and new fellowship programs.
- The number of participating fellows continues to increase annually.
- New affiliation/collaboration models are emerging. They will be tracked and reported in future years.

Resources:

1. Data on file, Industry Pharmacists Organization
2. Jacob B., Allison Hart A., Formella D., McGann S., Alexander JG. An Analysis of 2014-15 Industry Fellowships and Related Experiences of PharmD Fellows; 2014-2015. http://www.industrypharmacist.org/resources_pub.php?type=scholarlypublications
3. Aslam U., Lee P., Alexander JG. An Analysis of 2015-16 PharmD Industry Fellowships; 2015-2016. http://www.industrypharmacist.org/resources_pub.php?type=scholarlypublications