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An Evaluation of the Distribution, Scope, and Impact of Community Pharmacy Foundation Grants Completed by Academic Principal Investigators between 2002 and 2014

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ABSTRACT

Objective: From a total of 107 grants, a subset evaluation of 58 grants awarded to and completed by pharmacy faculty by the Community Pharmacy Foundation (CPF) from 2002 through 2014 was conducted to: (a) evaluate the representativeness across principal investigator (PI) academic institutions, (b) compare the scope of CPF grants completed by academic PIs across time, and (c) compare the impact of CPF grants completed by academic PIs across time. ***Methods***: Quantitative data for all 107 CPF grants awarded between 2002 and 2014 were obtained from the CPF website and CPF personnel. Qualitative ethnographic data was generated from principal investigator (PI) interviews by email communications. All 107 grants, including a subset of 58 grants awarded to pharmacy faculty, were analyzed and compared between 'Initial Years' (2002-2008) and 'Recent Years' (2009-2014) using descriptive statistics for quantitative data and an extraction of dominant themes from PI reflections for qualitative data. ***Results***: In the initial years (2002-2008), 54% of grants awarded to pharmacy faculty were from public academic institutions. This proportion increased to 80% in recent years (2009-2014). In recent years, pharmacy faculty projects were increasingly focused on higher AHRQ Impact Categories, such as changing policies and programs, clinical care and practice patterns, and health outcomes (AHRQ Impact Levels 2-4), rather than simply adding to the knowledge base (Impact Level 1). Academic investigators reported that funding positively influenced practice development (59%), promotion & advancement (59%), and expanded collaborations (38%). Diverse geographic representation of funding recipients was achieved. ***Conclusions***: CPF funding has been invaluable for investigators seeking experience securing grant funding. And the impact of CPF funding has transitioned from studies that add to the knowledge base only, toward studies that effect actual health outcomes or that profoundly change practice.

Keywords: Program Evaluation; AHRQ Impact Factor; Investigator Influence; Community Pharmacy, Grants

INTRODUCTION

The Community Pharmacy Foundation (CPF) is a non-profit organization that awarded over $7,000,000 between 2002 and 2014 spread towards 107 grants and special projects to advance community pharmacy practice and patient care.[1] The CPF's major goals are to support:

1. The development, processing, and use of findings that affirm the value of community pharmacy practice in the health care delivery system.
2. The measurement, publication, and dissemination of findings documenting the value of professional services delivered to patients by community pharmacists.
3. Efforts that measure the impact of pharmacist interventions in achieving the targeted therapeutic goals set collaboratively by the patient, the pharmacist and the other members of the health care team.
4. Efforts that evaluate patient-specific outcomes with regard to the quality of care delivered by community pharmacists.

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Grants are reviewed on a rolling basis four to five times per year during the Community Pharmacy Foundation Board of Directors meetings. The current composition of the CPF Board is publicly available on the CPF website (http://www.communitypharmacyfoundation.org/about/board.asp).

In order to assess the degree to which CPF grants fulfilled these goals and to inform the Foundation's awarding of future funding, the CPF collaborated with three University of Minnesota researchers in June of 2014 to design an evaluation of strategic decisions, trends, and impact of CPF funding. The evaluation described and compared the 107 grants completed in the Foundation's 'Initial Years' (2002-2008) and 'Recent Years' (2009-2014) in terms of representativeness, scope, and impact. A copy of the project synopsis can be found at the CPF website (http://communitypharmacyfoundation.org/).

Findings from this report generated additional research questions related to the representative distribution of grants awarded to academic principal investigators (PIs) by geographical location, ranking, and time. Therefore, of the total 107 CPF grants awarded and completed at the time of this program evaluation analysis, the subset of 58 grants awarded and completed by pharmacy faculty at 36 different schools and colleges of pharmacy served as the census for this analysis.

Study Objectives

The objectives of this study were to:

A. Evaluate the representativeness of PIs' academic institution for (1) Public or Private and (2) Geographic Location.
B. Compare the scope of CPF grants funding PIs at academic institutions by 'Initial Years' (2002-2008) and 'Recent Years' (2009-2014) for (3) Funding Level, (4) Three Part Aim, and (5) CPF Coordinated Use of Medications.
C. Compare the impact of CPF grants funding PIs at academic institutions by 'Initial Years' (2002-2008) and 'Recent Years' (2009-2014) for (6) AHRQ Impact Factor and (7) CPF Investigator Reflections.

METHODS

Quantitative and qualitative data were collected between June 2015 and August 2015 from the CPF website, CPF staff, and CPF grant awardees. One researcher (AO) extracted 58 grants completed by PIs receiving salary support from an academic institution from a total pool of 107 grants acquired from the CPF Grant List (www.communitypharmacyfoundation.org/grants/grants_list.asp). These grants were then sorted by the year they were completed into one of two groups, 'Initial Years' (i.e., 2002-2008) or 'Recent Years' (i.e., 2009-2014). These evaluation time periods were selected in collaboration with the CPF Board of Directors to represent a natural line of demarcation between equal time periods of CPF funding, and also more rigorous proposal evaluation criteria and monitoring procedures in the 'Recent Years.'

Categorization of the 58 CPF grants by the Three-part Aim, Coordinated Use of Medications, and AHRQ Impact Factor was completed by two researchers (AO and JS) serving as judges trained on the rules and procedures for coding. Each judge independently scored 30 grants and exceeded a threshold level of 90% agreement in scores. One researcher (AO) then completed the remainder of the coding for this study.

A. Representativeness of Academic Institutions

During the collaborative development of this evaluation, the CPF Board of Directors expressed interest in a description of the distribution, or diversity, of CPF funding across the country and among academic institutions. To determine the degree of academic representation of CPF funding, the 36 academic institutions affiliated with the 58 faculty grant awards were described according to university type (i.e., public or private) and geographic location [(i.e., the eight (American Association of Colleges of Pharmacy (AACP) and National Association of Boards of Pharmacy (NABP) districts)].

B. Comparison of Scope between 'Initial Years' and 'Recent Years'

Funding Level

The number and dollar amount awarded (expressed as categorical funding levels) for the 58 CPF project grants were computed directly from the CPF data files provided by the CPF Grants Administrator. "Number of funded projects" was computed for each year and also for "Initial Years" (2002-2008) and "Recent Years" (2009-2014). "Dollar amount" was defined as: (1) less than or equal to $1,000, (2) $1,001 to $25,000, (3) $25,001 to $50,000, (4) $50,001 to $100,000, and (5) greater than $100,000. "Award Recipient Types" were categorized as: (1) academic institution or (2) non-academic organization.

Three-Part Aim

The 58 academic institution CPF projects were analyzed for contributions to the national, "Three-Part Aim"[2] using the following categorizations:

- *Improving care for individual patients.* Projects with corresponding objectives and results that further the understanding, implementation, or evaluation of methods for "improving the individual experience of care" for patients.
- *Improving population health.* Projects with corresponding objectives and results that further the understanding, implementation, or evaluation of methods for "improving the health of populations".
- *Controlling health care costs through quality improvement.* Projects with corresponding objectives and results that further the understanding, implementation, or evaluation of methods for "reducing the per capita costs of care for populations".

Coordinated Use of Medications

The 58 CPF projects were analyzed for contributions made to the "Coordinated Use of Medications," which is part of the CPF's Strategic Interests Plan,[3] categorized as:

- *Payment reform.* Projects with results that further the understanding, implementation, or evaluation of global or budgeted payment models that standardize and incentivize indicated, effective, and safe medication use, and that engage patients in shared decision-making as adherent patients to help meet quality health goal performance benchmarks.
- *Delivery reform.* Projects with corresponding results that further the understanding, implementation, or evaluation of new payment models with accreditation or other prerequisites, as well as competitive strategies for delivering medication-related care and services within such systems.

- *Real-time data integration.* Projects with results that further the understanding, implementation, or evaluation of health information environments that make available standardized, comprehensive, and real-time data at the point of care on the patient's medication history and adherence that is crucial to effective and efficient medication use.

C. Comparison of Impact between 'Initial Years' and 'Recent Years'

AHRQ Impact Factor Framework

The 58 CPF projects were analyzed using the AHRQ Impact Factor framework, which is an assessment tool developed to link findings in outcomes research studies with impact on improving the health of patients and changing practice. This Impact Framework was developed to help stakeholders understand the "outcomes of outcomes research." There are four AHRQ Impact Factor levels.[4]

- Level 1: Studies that add to the knowledge base only and do not represent a direct change in policy or practice.
- Level 2: Studies that may lead to a policy or program change as a direct result of the research.
- Level 3: Studies that may cause a potential change in what clinicians or patients do, or result in a change in a care pattern.
- Level 4: Studies that may change actual health outcomes (clinical, economic, quality of life, and/or patient satisfaction), or profoundly change practice.

CPF Investigator Reflections

The impact of CPF funding on the careers of investigators was assessed by adapting ethnographic observation methods,[5] or self-ethnography, using a semi-structured query to guide responses and reflections from grantees. A total of 114 principal investigators and co-principal investigators served as the frame of reference for this study objective. Electronic-mail addresses were supplied by the CPF Grants Administrator, generating 99 current and valid e-mail addresses and 15 investigators for whom no updated contact information was available. These 99 CPF grantees included 58 academic primary investigators receiving salary support from an academic institution and 41 investigators who were not receiving salary support from an academic institution.

An Invitation Letter with the following query was transmitted to all 99 investigators with valid e-mail addresses; with instructions to reply directly back to the P.I. via e-mail:

> *How has funding from the Community Pharmacy Foundation helped you in your career progression?*
>
> *As you reflect on your response, please consider how CPF funding has helped you in terms of subsequent funding opportunities, new or expanded collaborations, promotion and advancement, practice development, and/or reimbursement reform. And please also let us know if your CPF project was continued with new funding has been replicated by others, and if your work has been recognized with any awards.*

Grantees were contacted with an initial Invitation Letter and asked to respond in 3-4 weeks. A second request was sent to those individuals who did not respond at 4 weeks, and at 6 weeks, after receiving the initial Invitation Letter. And finally, individuals who did not respond after two months were contacted by telephone by the Principal Investigator (BI) to explain reasons for conducting the analysis and to encourage participation.

The same methodological categorization rules, procedures, and processes were followed as that for the AHRQ Impact Factor analysis. Two independent judges exceeded the 90% level of agreement in their scoring of 20 investigator influence reflections, and one researcher (AO) completed the remainder of the coding for this project evaluation objective.

Data Analysis

The first six objectives (A1-C6 listed in Study Objectives of the Introduction section) were analyzed using descriptive statistics to summarize the data. Given the data constituted a complete census, rather than a sample, inferential statistics (e.g., chi-square p-value) were not used for comparisons and analysis. The last objective (C7) utilized qualitative data from PI reflections, which were analyzed by using a descriptive and interpretive ethnographic method.[5,6] A single investigator on the research team (BI) read through PI reflections multiple times to mine for dominant themes. The resulting themes were then discussed with the other members of the research team (JS and AO) and confirmed.

RESULTS

General Summary

The 58 grant projects that were awarded to and completed by academic PIs over CPF's lifetime (from 2002-2014) were used in this analysis. On average, 4 grant proposals were funded per year (range 1 to 9 per year). An average of five projects were completed each year (range from 0 to 13 per year). Figure 1 presents the number of CPF projects awarded to, and completed by, academic faculty by year. Additionally, Table 1 presents the 58 CPF completed grants by: (1) Name of Institution, (2) Institution Type, (3) Number of CPF Grants Completed, (4) AACP/NABP District Number, and (5) Number of Investigator Impact Responses Received.

Figure 1: Number of CPF Projects Awarded to, and Completed by, Academic PI Faculty by Year -- 2002-2014 (N=58)

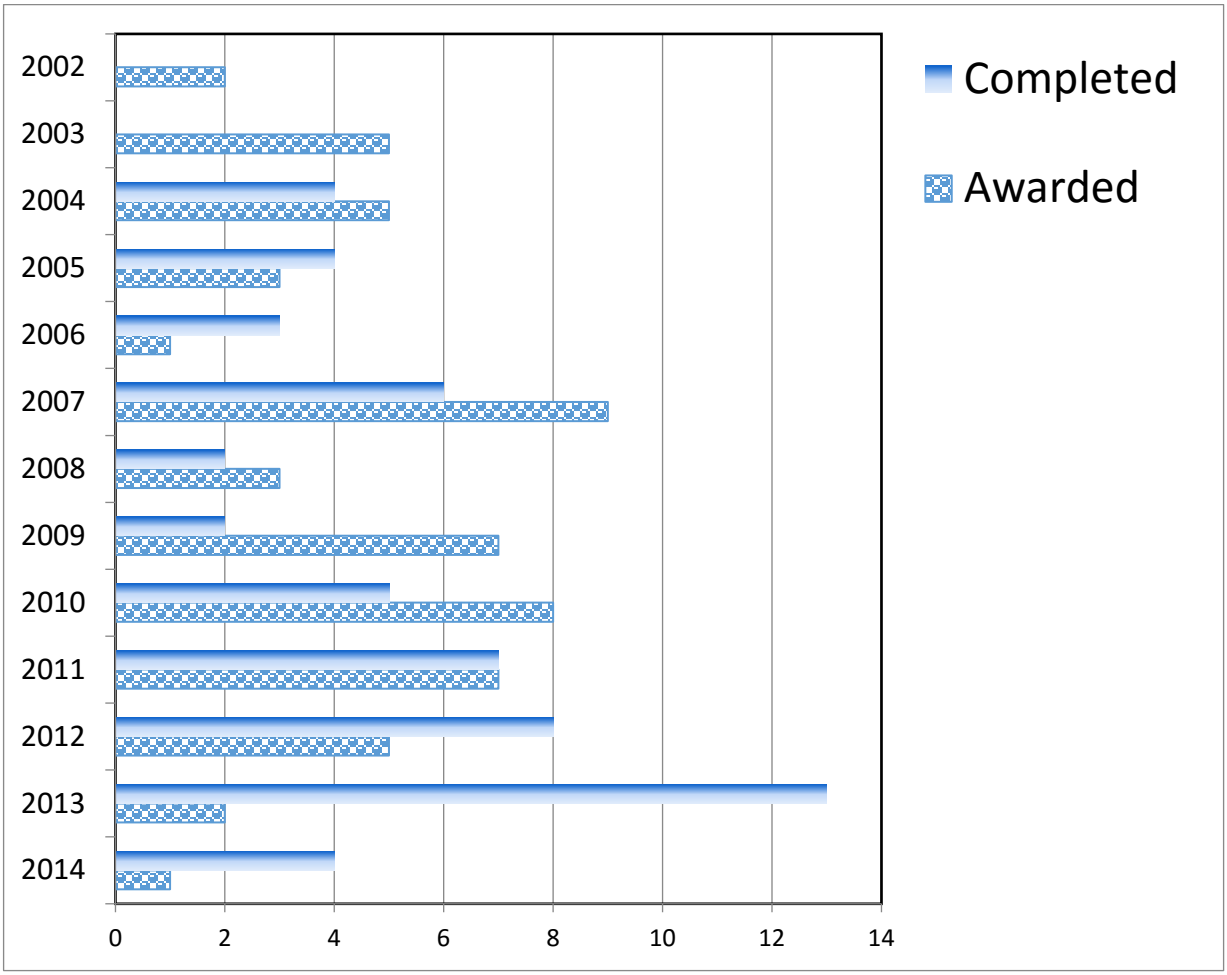


Table 1: Summary of CPF Completed Grants by Academic Institution, Institution Type, Grants Completed, AACP/NABP District, and the Number of Investigator Impact Responses Received (N=36)

Name of Institution	Institution Type	Number of CPF Grants Completed	AACP/ NABP District*	Number of Faculty Reflection Responses
Albany College of Pharmacy	Private	1	2	1
Campbell University, College of Pharmacy & Health Science	Private	1	3	-
Creighton University, School of Pharmacy	Private	1	5	-
Drake University, College of Pharmacy & Health Sciences	Private	3	5	3
Howard University, School of Pharmacy	Private	1	2	1
Massachusetts College of Pharmacy & Health Sciences	Private	2	1	-
Medical University of South Carolina	Public	1	3	1
Mercer University, College of Pharmacy & Health Sciences	Private	1	3	1
Midwestern University, College of Pharmacy-Glendale	Private	1	8	-
Northeastern University, School of Pharmacy	Private	1	1	1
Nova Southeastern University, College of Pharmacy	Private	1	3	-
Ohio Northern University, College of Pharmacy	Private	1	4	1
Oregon State University, College of Pharmacy	Public	1	7	-
South Dakota State University, College of Pharmacy	Public	1	5	1
Temple University, School of Pharmacy	Public	3	2	1
The Ohio State University, College of Pharmacy	Public	2	4	1
University at Buffalo, School of Pharmacy	Public	1	2	1
University of California San Francisco, School of Pharmacy	Public	1	8	1
University of Cincinnati, College of Pharmacy	Public	1	4	-
University of Connecticut, School of Pharmacy	Public	1	1	1
University of Iowa, College of Pharmacy	Public	4	5	2
University of Maryland, School of Pharmacy	Public	1	2	-
University of Michigan, College of Pharmacy	Public	3	4	1
University of Minnesota, College of Pharmacy	Public	2	5	2
University of North Carolina, School of Pharmacy	Public	1	3	-
University of Pittsburgh, School of Pharmacy	Public	3	2	2
University of Rhode Island, College of Pharmacy	Public	2	1	1
University of Southern California, School of Pharmacy	Private	1	8	1
University of Texas at Austin, College of Pharmacy	Public	3	6	
University of Wisconsin, School of Pharmacy	Public	4	4	2
Virginia Commonwealth University, School of Pharmacy	Public	1	2	1
Washington State University, College of Pharmacy	Public	1	7	1

Wayne State University, College of Pharmacy	Public	2	4	1
West Virginia University, School of Pharmacy	Public	1	2	1
Western University of Health Sciences, College of Pharmacy	Private	2	8	2
Xavier University of Louisiana, College of Pharmacy	Private	1	6	-
TOTAL (N=36)	**22 Public 14 Private**	**58 Grants 40 Public 18 Private**	**Eight Districts**	**32 Responses**

**American Association of Colleges of Pharmacy (AACP) and National Association of Boards of Pharmacy (NABP)*

A. Representativeness of Academic Institutions

To determine the degree of academic representation of CPF funding, the 36 academic institutions affiliated with the 58 faculty grant awards were first plotted on a national map. CPF faculty funding was then analyzed by comparing the number and percentage of awards in the following categories:

- public and private schools and colleges of pharmacy
- AACP/NABP Districts

Public vs Private

The distribution of CPF awards across public and private institutions shows that in the Initial Years (2002-2008) 54% of funding recipients were from public academic institutions. In the Recent Years (2009-2014), this proportion was 80%. **Table 2** presents a composite summary of all CPF grants awarded to faculty investigators.

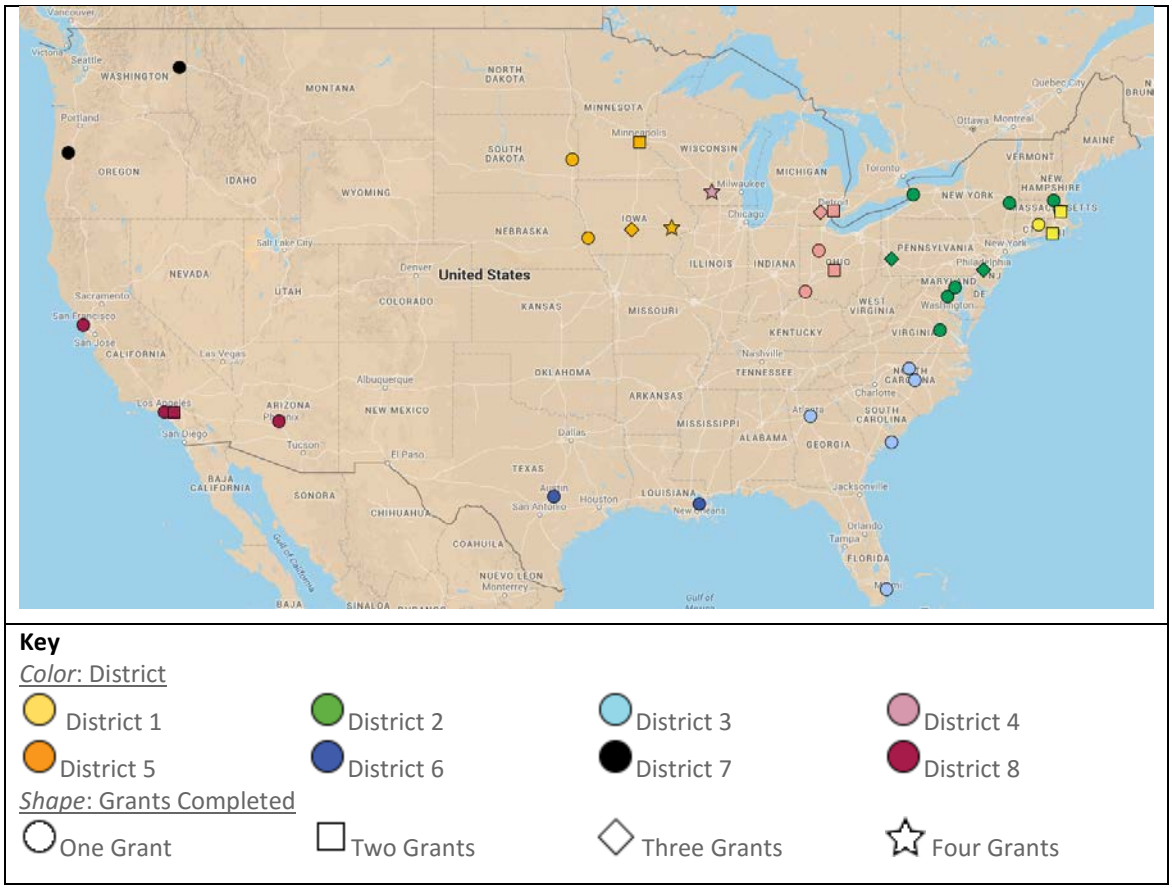
Table 2: Institution Type (Public and Private), for Projects Awarded to Faculty by the Community Pharmacy Foundation (Initial Years, 2002-2008 and Recent Years, 2009-2014)

Institution Type	Initial Years (2002-2008) n = 28	Recent Years (2009-2014) n = 30	Overall (2002-2014) N = 58
Public	54%	80%	67%
Private	46%	20%	33%

Geographic Location

There were 58 faculty at 36 academic institutions receiving CPF funding. The geographic distribution, corresponding AACP/NABP Districts, and number of grants at each of the 36 academic institutions are displayed on a map in **Figure 2**. Of the 58 grants, 24% were awarded to an academic institution in AACP/NABP Region 4 (IL, IN, MI, OH, WI), 21% were awarded in Region 2 (DE, DC, MD, NJ, NY, PA, VA, WV), 16% in Region 5 (IA, MN, NE, ND, SD), 10% in Region 3 (AL, FL, GA, KY, MS, NC, PR, SC, TN, VI), 9% in Region 1 (CT, ME, MA, NH, RI, VT), 9% in Region 8 (AZ, CA, CO, GM, HI, NV, NM, UT), 7% in Region 6 (AR, KS, LA, MS, OK, TX), and 5% in Region 7 (AK, ID, MT, OR, WA, WY).

Figure 2: Geographic Distribution of CPF Grantee Academic Institutions by AACP/NABP District (N=36 institutions)



B. Comparison of Scope between 'Initial Years' and 'Recent Years'

Funding Level

The 58 CPF grants completed by academic PIs were evaluated to describe the distribution of institution type (public vs. private) by Initial Years (2002-2008) and Recent Years (2009-2014). **Table 3** displays the categorical funding levels of CPF projects awarded to faculty. The distribution of dollar amounts for faculty-funded projects did not appear to differ substantially between the Initial Years and the Recent Years. Most projects were funded at the $25,001-$50,000 range.

Table 3: Dollar Amount for Projects Awarded to Faculty by the Community Pharmacy Foundation (Initial Years, 2002-2008 and Recent Years, 2009-2014)

Dollar Amounts	Initial Years (2002-2008) n = 28	Recent Years (2009-2014) n = 30	Overall (2002-2014) N = 58
≤ $1,000	0%	3%	2%
$1,001 - $25,000	32%	30%	31%
$25,001 - $50,000	46%	53%	50%
$50,001 - $100,000	21%	13%	17%
> $100,000	0%	3%	2%

Three-part Aim

The 58 CPF grants completed by academic institutions were evaluated to describe their contributions toward the "Three-Part Aim" for healthcare which are, (1) improving care for individual patients, (2) improving population health, and (3) controlling health care costs through quality improvement. The majority of projects that were completed in both the Initial Years and Recent Years made contributions to Improving Care for Individual Patients (Initial: 58%; Recent 56%) and Improving Population Health (Initial: 58%; Recent 61%). The most noticeable difference in the proportion of projects completed in the Initial Years compared with the Recent Years were contributions to controlling health care costs through quality improvement (0% and 18%, respectively).

Coordinated Use of Medications

The 58 CPF grants completed by academic institutions were evaluated to describe their contributions toward the "Coordinated Use of Medications," which is part of the CPF's Strategic Directions Plan (adopted in 2015), and calls for: (1) payment reform, (2) delivery reform, and (3) real-time data integration. The majority of completed projects were in the area of Delivery Reform (72% overall). Relatively few projects have been in the Payment Reform (7% overall) and Real Time Data Integration (10% overall) strategic priority areas.

Across all years, 60% of faculty projects contributed to one strategic priority category, 12% contributed to two categories, and 2% contributed to all three categories. A similar distribution pattern was also present in both the Initial Years (2002-2008) and Recent Years (2009-2014).

C. Comparison of Impact between 'Initial Years' and 'Recent Years'

AHRQ Impact Factor

The academic subgroup analysis of the 58 CPF grants awarded to pharmacy faculty from 2002 through 2014 was also categorized using the AHRQ Impact Factor for describing the outcomes of outcomes research. **Table 4** summarizes the distribution of pharmacy faculty grants by AHRQ Level of Impact.

Table 4: AHRQ Level of Impact for Completed CPF Projects Completed by Academic Faculty (Initial Years, 2002-2008 and Recent Years, 2009-2014)

AHRQ Level	Initial Years (2002-2008) n = 19	Recent Years (2009-2014) n = 39	Overall (2002-2014) N = 58
Level 1: Studies that add to the knowledge base only and do not represent a direct change in policy or practice	53%	36%	41%
Level 2: Studies that may lead to a policy or program change as a direct result of the research.	32%	36%	35%
Level 3: Studies that may cause a potential change in what clinicians or patients do, or results in a change in a care pattern.	16%	26%	22%
Level 4: Studies that may change actual health outcomes (clinical, economic, quality of life, and/or patient satisfaction), or profoundly change practice.	0%	3%	2%

There is a trend towards more recently completed grants reaching higher AHRQ impact levels as compared to the initial years. The majority (53%) of the projects completed by academic faculty during the Initial Years were Impact Level 1. These studies added to the knowledge base only and did not represent a direct change in policy or practice. Such studies were descriptive in nature and provided contributions to what is known about a phenomenon. In contrast, only 36% of projects completed in Recent Years (2009-2014) were at Impact Level 1. The majority of projects during the Recent Years were more likely to have an impact at Level 2 (36% of completed projects), Level 3 (26%), or Level 4 (3%). The Recent Years projects were more focused changing policies and programs, clinical care and practice patterns, and health outcomes. The only Level 4 impact study came from a grant of more than $50,000. And, for Level 1, Level 2, and Level 3 impact studies, the proportions of grants over $50,000 were 21%, 10%, and 15%, respectively.

CPF Investigator Reflections

There were 32 academic investigators (or 55% of faculty grantees) who responded to requests for investigator influence statements. Investigator influence responses were coded into the six categories of: (1) practice development, (2) promotion & advancement, (3) new & expanded collaborations, (4) funding opportunities, (5) awards, and (6) reimbursement reform. Of the 32 investigators who provided feedback, 47% provided feedback in one of the categories and the remaining

53% of the responders provided feedback that was coded in two or more categories. Thus, the majority of faculty investigators were influenced in multiple ways by CPF funding. The most commonly reported categories of influence were practice development (59%) and promotion & advancement (59%), followed by new & expanded collaborations (38%), funding opportunities (22%), awards (22%), and reimbursement reform (9%).

Faculty influence statements were extensive, ranging from three sentences to five pages of reflections. There were a number of common themes that emerged in the 32 faculty impact statements relating specifically to grantsmanship experience and to conducting implementation science research.[7] Faculty reflections related to grantsmanship experience were contained primarily in the categories of promotion & advancement, new & expanded collaborations, funding opportunities, and awards. And faculty reflections related to implementation science research aligned with the practice development and reimbursement reform categories.

The most common grantsmanship theme expressed by faculty respondents was the importance of CPF funding in launching their research careers by acquiring skills, experience, and confidence in securing funding. Respondents also revealed that CPF funding resulted in new collaboration opportunities and was instrumental in their promotion and advancement.

The most common reflections related to the implementation science theme focused on implementing and evaluating novel practice models, influencing policy decisions, measuring return on investment, and justifying reimbursement through employer and payer initiatives. Faculty investigators also reported subsequent funding opportunities from CPF funded projects, including the U.S. Department of Health and Human Services, the Kellogg Foundation, the National Institutes of Health (NIH) career development awards, the Pharmacy Quality Alliance, Wisconsin Medicaid, the Catholic Diocese of Memphis, grants that launched an entrepreneurial institute and two Centers for Medicare & Medicaid Services Health Care Innovations Awards.

Discussion

A. Representativeness of Academic Institutions

Public vs Private

In the Initial Years (2002-2008), 54% of funding recipients were from public academic institutions, which grew to 80% In the Recent Years (2009-2014). This disproportionate representation between public and private institutions in recent years may suggest that more resources are needed to support successful applications for faculty from private institutions.

Geographic Location

There was a broad geographic representation of faculty awardees at institutions across the eight AACP/NABP districts, with the exception of the interior West states. This finding of broad geographic representation supports the CPF Board of Directors interest in the distribution, or diversity, of funding across the country and among academic institutions. This representative distribution pattern is also important to prospective grantees with evidence of funding distributed across the country.

B. Comparison of Scope between 'Initial Years' and 'Recent Years'

Funding Level

The number and amount of grants awarded were remarkably similar between Initial Years and the Recent Years. This consistency across time appears to reflect the CPF Board's aim to fund based on estimated annual income, in order to maintain CPF in perpetuity.

Three-Part Aim

Over half of projects across both of the evaluated time-periods contributed to Improving Care for Individual Patients and Improving Population Health. However, there was a significant growth in contributions to Controlling Health Care Costs through quality improvement from the Initial Years (0%) to the Recent Years (18%). This growth likely aligns with greater recognition, integration, and value measurements of the pharmacist role within this area by the healthcare stakeholders.

Coordinated Use of Medications

A supermajority of completed projects contributed to Delivery Reform (72% overall), with substantially fewer doing so for Payment Reform (7% overall) and Real Time Data Integration (10% overall). This suggests a continued value by CPF for contributions to Delivery Reform, with a future emphasis on incorporating 'forward looking,' value-based benchmarks for payment reform and real-time data integration to address existing barriers and gaps in community pharmacy practice.

C. Comparison of Impact between 'Initial Years' and 'Recent Years'

AHRQ Impact Factor Framework

The majority of faculty projects during the Initial Years were in Level 1 (53%), but this number dropped to roughly a third (36%) in the Recent Years. This trend suggests that recent CPF faculty projects were increasingly focused on changing policies and programs, clinical care and practice patterns, and health outcomes, rather than adding to the knowledge base about medical conditions and medications.

CPF Investigator Reflections

It is clear that CPF funding is having an important impact on the careers of colleagues in academia and funds are being used by

grantees to meet the mission of academic institutions. Each college of pharmacy receives a funding report and ranking from the American Association of Colleges of Pharmacy (AACP), based on funding that faculty receive. The annual AACP Pharmacy Faculty Research Grant Data (PFRGD) Report includes all types of research grants (NIH, Other Federal, Non-Federal, and Collaborative research grants), as long as specific conditions are met pertaining to peer-reviewed research. Based on a grantee email response, it was discovered by reviewing their university AACP PFRGD Report, that CPF funded projects were not being included due to a misconception that CPF studies were not peer-reviewed. Since this time, AACP and CPF have been collaborating to ensure that CPF funded research is included in the PFRGD Report of schools and colleges of pharmacy. This is significant because the value of CPF funding, which had not been included in past AACP-PFRGD annual funding reports to schools and colleges of pharmacy, may be understated and therefore negatively impact both the academic institutions and the career path of individual faculty members. Academic institutions may want to review their policies and procedures for including faculty CPF grants in their official accounting to AACP to determine if they are inadvertently undervaluing, or discrediting, the scholarly contributions of faculty who receive CPF funding.

Implications for the Academy relates directly to strategic planning initiatives in collaboration with the AACP. Recognition of CPF funding by AACP in the Annual PFRGD Report will appropriately encourage and incentivize submitting grant proposals. And the results of this program evaluation analysis reveal that CPF funding is having an important influence on the careers of faculty in terms of promotion, advancement, awards, prestige and future funding opportunities.

Limitations of this program analysis include the use of observational methods, which may have resulted in biased applications of scope and impact ratings. Additionally, analysis of investigator reflections relied on respondents to the invitation letter, who as a group may have been fundamentally different in their responses than non-respondents.

An important aspect of this program evaluation is the impact on the funding organization itself. Critical self-reflection in relationship to strategic focus and direction is essential for most organizations. The Community Pharmacy Foundation utilized the 10-year grant completion (2004-2014) milepost as an opportunity to conduct this program evaluation. Based on findings of this program evaluation analysis, the CPF Board of Directors is exploring a number of quality improvement initiatives designed to enhance collaborations with the academic community nationwide.

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Conflict of Interest Statement: Anne Marie Kondic is Executive Director and Grants Administrator for the Community Pharmacy Foundation.

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Institutional Review Board: This study was reviewed by the University of Minnesota – Human Research Protection Program as an Exempt Category 4 evaluation project (IRB Study Number 1507E76723).

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