Advanced Practice Nursing Workforce Survey 2014
Executive Summary

The results from the 2015 Illinois HealthCare Action Coalition (IHAC) Advanced Practice Nursing workforce survey are reported in this document. The survey captured data on the demographics, education, state distribution, job activities and practice foci of Advanced Practice Nurses (APNs) in Illinois. The survey was conducted via an electronic platform and announced to Illinois APNs via email and a number of US mail reminders. Participation was voluntary, and 2,365 of the 9000 plus Illinois APNs completed the survey.

**General overview:** Data on the characteristics, supply, and distribution of APNs in the State of Illinois is essential to expanding access to care and planning for provisions of essential services, both in primary care and acute care as well as new team-based models of care. This report contains data on the demographics of Illinois’ current APN workforce, the relative numbers of APNs in each age group, their cultural diversity, and educational preparation. The data quantifies the services APNs provide, how they bill for these services, and how they maintain their required collaborative agreements with their respective Illinois physician. Finally, the survey captures APN density throughout the state as well as their work with a broad range of populations.

**Aging workforce:** The report documents important information about the aging of the Illinois APN workforce, 41.5% of our sample are 55-65 years of age. As a comparison, the average age of this age cohort was 34% the 2012 National Sample Survey of Nurse Practitioners. Interestingly, years of experience as an APN does not closely correlate with the age of the APN -- suggesting the diverse career trajectories of APNs.

**Geographic distribution:** The report maps out where APNs are practicing in the state; documenting that APNs generally practice in areas of high population density. While of great interest, it is difficult to map APN practice sites in terms of Medically Underserved Areas (MUAs). The broad county-wide designation of an MUA masks the diversity of underserved areas within the region -- best indicated by a zip code or census track with a county. The current data
is an excellent start toward efforts to map the practice of APNs, and their provision of care to underserved areas of the State.

**Decreased diversity:** The data indicate the lack of cultural diversity within the APN workforce. Of particular concern is that diversity actually decreases in the younger cohort; a trend which is of great concern given the increased diversity of our state.

**Specialty/Work Place Characteristics/Billing:** The respondents reported on their nursing specialty, billing arrangements, and workplace setting. The survey participants were provided a choice among 26 job settings as well as the option to write in settings that were not listed. The majority of respondents practice in ambulatory settings; but many APNs indicated they split time between a hospital and outpatient setting. Approximately 35% of APNs indicated they practice in traditional primary care settings but other specialties were also represented; specialties that are increasing present in primary care, such as Psychiatric/Mental Health. In line with Illinois regulation, APNs maintain collaborative agreements but with a range of physician-collaborator relationships. Consistent with national data, most APNs are satisfied with their work; however, the degree of satisfaction varies based on the level of perceived hierarchy within that collaborative relationship. Forty percent of respondents bill exclusively under their National Provider Identifier; rising to 53% with the addition of APNs who bill a combination of NPI and physician /clinic billing.

**Summary:** Taken together, these data will be extremely valuable as health care planners project the human health care capital that will be needed in Illinois. These data will be of great use in estimating the current APN supply, their demographics, and practice specialties. The anticipated shortage of primary care providers is particularly acute in Illinois. Focused workforce planning is urgently needed to assure access to healthcare for Illinois residents.
About the Report

The Advanced Practice Nursing Workforce Survey and Report were directed by the Illinois Healthcare Action Coalition (IHAC). Members of the IHAC Survey Group included Michelle DiGiovanni (project manager), Kathleen Delaney, Ben Inventor, Deborah Karas, Michele Knappe and Susan Swart. Data analysis was performed by the Stevenson Center for Community and Economic Development at Illinois State University. Funding for this project was provided by the Robert Woods Johnson Foundation (RWJF) through the Future of Nursing State Implementation Program (SIP).

About the Data

Source data was obtained through an online survey targeting Advanced Practice Nurses in Illinois. The survey was available through Survey Monkey web services from the first of March 2014 through November 2014. The IHAC Survey Group carried out a multifaceted plan throughout the survey period to inform eligible participants. Efforts included email notifications, post card reminders, flyers at national meetings, and encouragement through professional organizations. The voluntary survey yielded 1,200 initial responses in the first month and 2,365 participants at conclusion. This represents more than 25% of the 9,000 plus APNs licensed to practice in Illinois.

The survey included 71 questions utilizing as a base the questions from the HRSA National Sample Survey of Nurse Practitioner Centers with additions on language proficiency, billing practices, place-of-work zip codes, and professional collaboration. A full list of survey questions is provided in Appendix A. Information from the survey is categorized into five areas in this report: demographic information (including age), human capital (education, specialties, earnings), workplace characteristics (settings, services, collaboration), job satisfaction, and geographic information (across Illinois counties).
Demographics

The distribution of APN survey participants by selected age categories is presented in the first row of Figure 1. Age is derived from participant responses to date of birth with a 9% rate of non-response. Individuals in the 55 and above age group columns sum to 41.5% of total respondents. The sizeable portion of Illinois APNs in these advanced age categories serves as a useful context for other observations in this report. Age distribution is a common focus of numerous reports on the nursing workforce. A recent report by the Health Resources and Services Administration (*The U.S. Nursing Workforce: Trends in Supply and Education*, April 2013) discusses age-related concerns at length based on national data collected four to five years earlier than the survey data in this study.

**Figure 1: Age and Diversity**

<table>
<thead>
<tr>
<th>Category</th>
<th>34 &amp; Under</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65 &amp; Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Frequency</td>
<td>253</td>
<td>399</td>
<td>515</td>
<td>769</td>
<td>213</td>
</tr>
<tr>
<td>White Female</td>
<td>81.4%</td>
<td>77.9%</td>
<td>83.3%</td>
<td>89.6%</td>
<td>86.9%</td>
</tr>
<tr>
<td>Not White</td>
<td>13.8%</td>
<td>12.0%</td>
<td>9.1%</td>
<td>6.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Asian</td>
<td>4.7%</td>
<td>6.5%</td>
<td>3.9%</td>
<td>0.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>African American</td>
<td>4.0%</td>
<td>4.5%</td>
<td>4.9%</td>
<td>4.3%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Latina</td>
<td>4.0%</td>
<td>4.3%</td>
<td>2.7%</td>
<td>1.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Male</td>
<td>7.9%</td>
<td>9.3%</td>
<td>7.2%</td>
<td>4.2%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Figure 1 also explores diversity of the Illinois APN workforce. White females constitute a substantial majority although there are indications of modestly changing demographics observable across age categories. Asian, Latina and male respondent shares are highest in the 35-44 and 34 & under age categories.

Language proficiency beyond English is a related issue with potential implications for effective healthcare provision to diverse populations. Out of all APN survey respondents, 4.9%
report that they speak Spanish and 4.5% report that they use Spanish in their current position. A sum of 2.5% report speaking any other language and only 1.2% use any other language on the job. Polish, Italian and Tagalog are the only additional languages with non-trivial responses.

Years of experience, as an RN and separately as an APN, can be derived from responses to survey questions on initial licensure. Figures 2a and 2b present experience in categories of 0-6 years, 7-14 years, 15-23 years, 24-33 years and 34+ years. The distribution of experience is presented for each of the familiar age cohorts. Years as an RN are shown in Figure 2a while experience as an APN is presented in Figure 2b.

Survey respondents exhibit substantial RN experience with over 75% in the 15 years or more categories. APN years of experience is a very different story with only 36% in the three most experienced categories. This mismatch is, in part, a natural consequence of the sequence of qualification. However, the variety of ages at which individuals enter and advance in nursing is a contributing factor. Age is an imperfect predictor of nursing career choices and so age is imperfectly correlated with APN experience.

**Figure 2a: RN Experience**

<table>
<thead>
<tr>
<th>Experience by RN Groups</th>
<th>34 &amp; Under</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65 &amp; Under</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>49</td>
<td>17</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>7-14</td>
<td>186</td>
<td>157</td>
<td>25</td>
<td>23</td>
<td>2</td>
<td>393</td>
</tr>
<tr>
<td>15-23</td>
<td>0</td>
<td>204</td>
<td>162</td>
<td>53</td>
<td>7</td>
<td>426</td>
</tr>
<tr>
<td>24-33</td>
<td>1</td>
<td>1</td>
<td>297</td>
<td>195</td>
<td>12</td>
<td>506</td>
</tr>
<tr>
<td>34+</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>470</td>
<td>182</td>
<td>654</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>379</td>
<td>494</td>
<td>742</td>
<td>203</td>
<td>2054</td>
</tr>
</tbody>
</table>

**Figure 2b: APN Experience**

<table>
<thead>
<tr>
<th>Experience by APN Group</th>
<th>34 &amp; Under</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65 &amp; Under</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>228</td>
<td>196</td>
<td>160</td>
<td>116</td>
<td>9</td>
<td>709</td>
</tr>
<tr>
<td>7-14</td>
<td>6</td>
<td>151</td>
<td>170</td>
<td>239</td>
<td>39</td>
<td>605</td>
</tr>
<tr>
<td>15-23</td>
<td>1</td>
<td>30</td>
<td>146</td>
<td>243</td>
<td>75</td>
<td>495</td>
</tr>
<tr>
<td>24-33</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>108</td>
<td>46</td>
<td>171</td>
</tr>
<tr>
<td>34+</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>36</td>
<td>34</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>379</td>
<td>494</td>
<td>742</td>
<td>203</td>
<td>2054</td>
</tr>
</tbody>
</table>
The survey asks participants a pair of questions on retirement plans. The distribution across selected categories of years to retirement is presented in Figure 3. The horizontal bar for each category represents both the number of responses (listed to the right) and the share of total (indicated on the axis below). The largest category is composed of APNs reporting more than ten years before exit. This group of 1,095 represents 46.3% of all survey respondents. The sum of undecided (127) and non-responding individuals (512, listed in the lower right corner) outpaces other specific options and may imply substantial uncertainty with regard to retirement plans.

![Figure 3: Years to Retirement](image)

- This Year: 9
- 1-2 Years: 61
- 3-5 Years: 195
- 6-10 Years: 388
- More than 10 Years: 1096
- Undecided: 127

Non Response: 512
Human Capital

Skills and knowledge can be productive in a variety of contexts and education (elementary, secondary, undergraduate studies) often serves as an example of human capital that is “general” in nature. Alternatively, skills and knowledge can be “specific” with greatest value in a unique industry setting or specialized occupational role. Both types of human capital play important roles in the nursing workforce and in this section we explore educational attainment and area of medical specialty in the APN survey responses.

Advanced educational credentials are a distinguishing characteristic of the APN workforce. Over 79% of those responding to education completed indicate attainment of a Master’s degree with an additional 17% attaining a Post Master’s Certificate or Doctorate. Figure 4 presents these educational response frequencies by the familiar age categories.

Specialized training and experience can enhance skills that are most valuable in a particular context. Information on individual employment in medical specialty areas is provided through the survey with detailed specialties allocated to four broad categories (Primary Care, Surgical, Subspecialties, and Other). A substantial number of write-in responses were codified with the assistance of IHAC Survey Group consultation. Response frequencies across 41 medical specialties are presented in Figure 5 ordered with the most frequent in the top rows.
<table>
<thead>
<tr>
<th>Primary Specialty</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Practice</td>
<td>394</td>
<td>22.92%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>105</td>
<td>6.13%</td>
</tr>
<tr>
<td>General Pediatrics</td>
<td>64</td>
<td>3.72%</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>46</td>
<td>2.68%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>20</td>
<td>1.16%</td>
</tr>
<tr>
<td>Pulmonary/Respiratory</td>
<td>18</td>
<td>1.05%</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>13</td>
<td>0.76%</td>
</tr>
<tr>
<td>Renal/Nephrology</td>
<td>11</td>
<td>0.64%</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>25</td>
<td>1.45%</td>
</tr>
<tr>
<td>Gynecology</td>
<td>195</td>
<td>11.34%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>89</td>
<td>5.18%</td>
</tr>
<tr>
<td>Obstetric/Gynecologic Health</td>
<td>195</td>
<td>11.34%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>89</td>
<td>5.18%</td>
</tr>
<tr>
<td>Psychiatry/Mental Health</td>
<td>77</td>
<td>4.48%</td>
</tr>
<tr>
<td>Palliative Care/Pain Management</td>
<td>61</td>
<td>3.55%</td>
</tr>
<tr>
<td>Other/cardiovascular, trauma</td>
<td>50</td>
<td>2.91%</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>49</td>
<td>2.85%</td>
</tr>
<tr>
<td>Hematology/Oncology</td>
<td>42</td>
<td>2.44%</td>
</tr>
<tr>
<td>Emergency Care</td>
<td>37</td>
<td>2.13%</td>
</tr>
<tr>
<td>Nursing Home Care</td>
<td>36</td>
<td>2.09%</td>
</tr>
<tr>
<td>Neurology</td>
<td>34</td>
<td>1.98%</td>
</tr>
<tr>
<td>Other (Includes Non-Clinical Specialty)</td>
<td>32</td>
<td>1.86%</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>25</td>
<td>1.45%</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>10</td>
<td>0.58%</td>
</tr>
<tr>
<td>Pediatric Intensive Care</td>
<td>10</td>
<td>0.58%</td>
</tr>
<tr>
<td>Health Promotion/Health Education</td>
<td>10</td>
<td>0.58%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>9</td>
<td>0.52%</td>
</tr>
<tr>
<td>Sleep</td>
<td>6</td>
<td>0.35%</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>5</td>
<td>0.29%</td>
</tr>
<tr>
<td>Allergy &amp; Immunology</td>
<td>4</td>
<td>0.23%</td>
</tr>
<tr>
<td>College Professor/Educ</td>
<td>4</td>
<td>0.23%</td>
</tr>
<tr>
<td>Other Specialty-ENT</td>
<td>3</td>
<td>0.17%</td>
</tr>
</tbody>
</table>

**Total** | 609  | 35.43% |
---|---|---|
**Total** | 418  | 24.33% |
**Total** | 578  | 33.61% |
**Total** | 114  | 6.63% |
Family Practice hosts the largest concentration of APNs with 22.9% of all respondents followed by OB/GYN Women’s Health at 11.3%. Other specialties with at least 3.5% include Internal Medicine, Cardiology, Psychiatry/Mental Health, General Pediatrics, and Palliative Care. Additional specialties exceeding 2.0% are Other Surgery, Anesthesia, Geriatrics, Hematology/Oncology, Urgent Care, Emergency Care, and Intensive Care. Survey participants listing these top 14 specialties make up nearly 75% of all APN respondents.

Aggregate frequencies for each of the broad categories are shown at the bottom of the table. About 35% of respondents identify primary specializations categorized in the survey as Primary Care.

Annual salary and typical weekly hours for primary position are provided by nearly 80% of survey respondents. The salary distribution for all APNs is provided in Figure 6. Several of the observations on the lower end are associated with employment at less than full-time hours. The resulting median for APNs with full time hours is in the $90,000 to $95,000 interval.

Earnings differences among APNs are associated with primary medical specialties as well as a number of other contributing factors (including education, experience, and work setting). Detailed specialties with the highest median full time earnings include Anesthesia, Dermatology, Allergy and Immunology, Neonatal, and Urological Surgery. Within Primary Care, median earnings in Geriatrics and Pediatrics appear to outpace those in Internal Medicine and Family Practice.
Workplace Characteristics

The APN workforce survey offers a valuable range of questions about the workplace environment. These include primary job setting, services provided, degree of professional collaboration, and job satisfaction.

Primary job setting is provided with numerous specific settings grouped into selected broad categories (Ambulatory, Hospital, Elder Care, Public Health, and Other). Response frequencies across 26 primary job settings are presented in Figure 7 ordered with the most frequent in the top rows.

The most frequent response is Private Physician with 25.6% of all APN respondents followed by Hospital Inpatient at 19.0% and Hospital Outpatient at 10.1%. Other settings with at least 3.5% include Retail Based, Academic, Federal Clinic, School/College, and Private Office. Additional settings exceeding 2.0% are Community Health, General Long Term Elder Care, and Hospital Emergency. APNs listing these top 11 settings as primary make up nearly 88% of all survey respondents.

Primary job setting is associated with earnings differences among APNs. Specific settings with the highest median full time earnings include Surgery, Hospital Administration, and Hospital Emergency. Job settings with the lowest earnings appear to be Public Community Health, Federal Clinic, Hospice, and Academic.
## Figure 7: Principal Setting

<table>
<thead>
<tr>
<th></th>
<th>Ambulatory</th>
<th></th>
<th>Hospital</th>
<th></th>
<th>Other</th>
<th></th>
<th>Elder Care/ Public Health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
<td>Frequency Percent</td>
</tr>
<tr>
<td>Private Physician</td>
<td>490 25.6%</td>
<td>Inpatient 364 19.0%</td>
<td>Outpatient 194 10.1%</td>
<td>Academic 123 6.4%</td>
<td>School/ College 73 3.8%</td>
<td>Public/ Community Health 56 2.9%</td>
<td>General Long Term/ Elder Care 49 2.6%</td>
<td>Rural Health 34 1.8%</td>
</tr>
<tr>
<td>Retail Based</td>
<td>126 6.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Clinic</td>
<td>88 4.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Office</td>
<td>68 3.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urgent Care</td>
<td>29 1.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Managed Clinic</td>
<td>21 1.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery</td>
<td>11 0.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>9 0.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Clinic</td>
<td>4 0.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>833 43.5%</td>
<td></td>
<td>650 34.0%</td>
<td></td>
<td>242 12.7%</td>
<td></td>
<td>188 9.9%</td>
<td></td>
</tr>
</tbody>
</table>
Figure 8 documents APN survey information on services provided to patients. Responses are ordered by frequency in the “most patients” column. The top three responses are “counsel and educate patients and families”, “conduct physical exams and obtain medical histories”, and “prescribe drugs for acute and chronic illnesses”.

<table>
<thead>
<tr>
<th>Services Provided</th>
<th>Most Patients</th>
<th>Some Patients</th>
<th>Few Patients</th>
<th>No Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counsel and educate patients and families</td>
<td>83.6</td>
<td>13.3</td>
<td>2.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Conduct physical examinations and obtain medical histories</td>
<td>81.0</td>
<td>12.3</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Prescribe drugs for acute and chronic illnesses</td>
<td>72.8</td>
<td>14.5</td>
<td>5.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Order, perform, and interpret lab tests, x-rays, EKGs, and other diagnostic studies</td>
<td>68.7</td>
<td>19.2</td>
<td>6.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Diagnose, treat, and manage acute illnesses</td>
<td>64.9</td>
<td>21.2</td>
<td>8.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Diagnose, treat, and manage chronic illness</td>
<td>52.7</td>
<td>23.9</td>
<td>15.4</td>
<td>8.1</td>
</tr>
<tr>
<td>Provide preventative care, including screening and immunizations</td>
<td>51.4</td>
<td>18.4</td>
<td>13.2</td>
<td>17.1</td>
</tr>
<tr>
<td>Provide care coordination</td>
<td>50.4</td>
<td>28.2</td>
<td>14.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Make referrals</td>
<td>40.2</td>
<td>41.9</td>
<td>13.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Participate in practice improvement activities</td>
<td>32.4</td>
<td>32.3</td>
<td>23.7</td>
<td>11.7</td>
</tr>
<tr>
<td>Perform procedures</td>
<td>19.4</td>
<td>27.7</td>
<td>27.7</td>
<td>25.2</td>
</tr>
<tr>
<td>Provide psychotherapy</td>
<td>5.6</td>
<td>10.8</td>
<td>14.1</td>
<td>69.5</td>
</tr>
<tr>
<td>Deliver anesthesia</td>
<td>4.5</td>
<td>2.2</td>
<td>4.8</td>
<td>88.6</td>
</tr>
</tbody>
</table>

Bill arrangement and the use of a National Provider Identifier (NPI) number are derived from three questions on the survey. The response rate to the first question, “Do you have a NPI number?”, was 73.5%. The second question asked, “Do you, or whoever handles accounting for you, bill under your NPI number?” and had a nearly perfect response rate conditional on answering the first question. Placed elsewhere in the survey is a third question, “Which of the following best describes your billing arrangements for your principal APN position?” Options include “Bill under a physician’s number”, “Bill under my clinic/ facility number”, “Bill under my provider number”, “No billing, cash only”, and “No, billing, grant supported/ free clinic”. For clarity of presentation the three questions were combined into one display.

Billing responses are presented in Figure 9. The most frequent response asserts that the APN bills solely using their individual NPI. About 40% of respondents elect this option. The other three choices shown above the dashed line imply multiple billing practices by APNs including use of their individual NPI. The four choices below the dashed line indicate those APNs who do not have an NPI or have it but do not use it for billing.
Another workplace characteristic addressed in survey responses is the nature of professional collaboration with physicians. APN responses on two related questions are provided by Figure 10. The first question is ordered by APN response frequency with the most collaborative description (equal colleagues / no hierarchy) showing up in the middle of the pack at 9.6%. A somewhat less collaborative description (medical director oversees / accountable) garners more responses at 12.0%. The least collaborative description is jointly defined with three options (physician cosigns, physician sees and signs off, hierarchical / supervisory) that are selected by a combined 18.1%. The second question offers additional information on the extent of physician presence on-site.
Physician Collaboration

<table>
<thead>
<tr>
<th>Collaboration</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborate with a physician on site</td>
<td>945</td>
<td>40.0%</td>
</tr>
<tr>
<td>Collaborate with a physician at another site</td>
<td>373</td>
<td>15.8%</td>
</tr>
<tr>
<td>S/he is the medical director who oversees all of our practice and I am accountable to the medical director, as are all other providers</td>
<td>284</td>
<td>12.0%</td>
</tr>
<tr>
<td>Equal colleagues/no hierarchy</td>
<td>227</td>
<td>9.6%</td>
</tr>
<tr>
<td>Physician cosigns orders and/or progress notes</td>
<td>197</td>
<td>8.3%</td>
</tr>
<tr>
<td>Physician sees and signs off on the patients I see</td>
<td>120</td>
<td>5.1%</td>
</tr>
<tr>
<td>Hierarchical/supervisory in which I must accept his/her clinical decision about the patients I see</td>
<td>112</td>
<td>4.7%</td>
</tr>
<tr>
<td>No physician in my practice</td>
<td>51</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

Multiple Answers                                                                 | 579 | 24.5%  |

Physician presence on site to discuss patients

<table>
<thead>
<tr>
<th>Presence of Physician</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>76%-100% of the time</td>
<td>736</td>
<td>47.4%</td>
</tr>
<tr>
<td>51%-75% of the time</td>
<td>172</td>
<td>11.1%</td>
</tr>
<tr>
<td>26%-50% of the time</td>
<td>131</td>
<td>8.4%</td>
</tr>
<tr>
<td>1%-25% of the time</td>
<td>251</td>
<td>16.2%</td>
</tr>
<tr>
<td>0% of the time</td>
<td>262</td>
<td>16.9%</td>
</tr>
</tbody>
</table>
Job Satisfaction

Workforce recruitment, engagement, development and retention can be influenced by a wide range of factors. These include objectively measurable elements such as salary or time assignment. Personal assessments of relatively subjective elements such as level of autonomy or respect from colleagues may influence workforce outcomes as well. The APN Workforce Survey includes several questions about job satisfaction that include reference to an appropriately wide range of issues.

Table 11 presents job satisfaction measures. Column headings 1 through 5 refer to alternative descriptors from very satisfied (1) to very dissatisfied (5). On overall job satisfaction, APN survey participants give 31.9% very satisfied and 55.6% satisfied. Results on specific elements suggest relatively more satisfaction with patient interactions and less satisfaction on administrative support. Items scoring particularly poorly are “input into organizational policies” and paperwork.

****Figure 11:****

<table>
<thead>
<tr>
<th>Aspects of Principal Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction with Principal Position</td>
<td>31.9</td>
<td>55.6</td>
<td>11.1</td>
<td>1.4</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspects of Principal Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of time in patient care</td>
<td>41.1</td>
<td>45.7</td>
<td>7.3</td>
<td>1.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Patient mix</td>
<td>33.8</td>
<td>54.5</td>
<td>5.1</td>
<td>0.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Patient load</td>
<td>29.4</td>
<td>51.9</td>
<td>10.1</td>
<td>2.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Number of hours worked, including overtime</td>
<td>28.0</td>
<td>51.9</td>
<td>15.3</td>
<td>4.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Salary/benefits</td>
<td>20.8</td>
<td>51.4</td>
<td>21.9</td>
<td>5.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Amount of administrative support</td>
<td>20.8</td>
<td>42.9</td>
<td>24.9</td>
<td>10.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Amount of paperwork required</td>
<td>13.3</td>
<td>44.6</td>
<td>28.9</td>
<td>11.1</td>
<td>2.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspects of Principal Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of autonomy</td>
<td>44.6</td>
<td>40.3</td>
<td>10.8</td>
<td>3.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Respect from other colleagues</td>
<td>41.7</td>
<td>48.7</td>
<td>7.0</td>
<td>2.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Sense of value for what you do</td>
<td>40.9</td>
<td>42.2</td>
<td>12.8</td>
<td>3.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Respect from physician colleagues</td>
<td>34.9</td>
<td>45.6</td>
<td>13.1</td>
<td>3.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Opportunities for professional development</td>
<td>23.6</td>
<td>49.5</td>
<td>19.8</td>
<td>5.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Input into organizational/practice policies</td>
<td>19.8</td>
<td>43.1</td>
<td>23.8</td>
<td>9.9</td>
<td>3.3</td>
</tr>
</tbody>
</table>
In our discussion above it was clear that Advanced Practice Nurses in Illinois experience work environments with a range of “physician collaborative relationship” conditions. Using that variation across individuals as a filter we are able to interact collaborative conditions with job satisfaction responses. The results of this exercise are displayed in Figure 12. APNs in the most collaborative environments express the highest levels of overall job satisfaction. This result is robust across objective job descriptions including time in patient care, patient mix, hours worked, and administrative support. The finding is amplified for subjective job descriptions including autonomy, respect from colleagues, sense of value, and opportunities for professional development.
**Figure 12:**

<table>
<thead>
<tr>
<th>Aspects of Principal Position</th>
<th>Low/ Equal Hierarchy</th>
<th>Medium/ Accountable</th>
<th>High/ Subordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  N/A</td>
<td>1  2  3  4  N/A</td>
<td>1  2  3  4  N/A</td>
</tr>
<tr>
<td>Overall Satisfaction with Principal Position</td>
<td>48.5  44.5  7.1  0.0</td>
<td>N/A</td>
<td>33.5  51.8  14.1  0.7</td>
</tr>
<tr>
<td>Proportion of time in patient care</td>
<td>57.7  39.7  1.8  0.4</td>
<td>44.4  46.8  6.3  1.8</td>
<td>43.0  44.8  8.8  2.8</td>
</tr>
<tr>
<td>Patient mix</td>
<td>49.3  45.8  2.6  0.4</td>
<td>38.7  54.6  4.6  0.7</td>
<td>35.1  56.1  6.0  0.9</td>
</tr>
<tr>
<td>Patient load</td>
<td>40.5  51.1  4.9  2.2</td>
<td>33.8  51.8  9.9  2.8</td>
<td>32.0  48.3  15.7  2.5</td>
</tr>
<tr>
<td>Number of hours worked, including overtime</td>
<td>40.1  42.3  14.1  3.5</td>
<td>29.9  49.3  18.3  2.5</td>
<td>24.5  50.8  18.5  6.3</td>
</tr>
<tr>
<td>Salary/benefits</td>
<td>26.0  49.3  19.8  4.4</td>
<td>24.3  50.7  18.7  5.6</td>
<td>17.9  49.5  26.3  6.3</td>
</tr>
<tr>
<td>Amount of administrative support</td>
<td>30.0  37.4  21.6  11.0</td>
<td>21.1  46.1  24.7  7.8</td>
<td>19.1  42.0  24.5  14.1</td>
</tr>
<tr>
<td>Amount of paperwork required</td>
<td>19.8  42.3  28.2  8.8</td>
<td>15.5  41.9  29.9  11.6</td>
<td>14.7  45.1  28.5  11.0</td>
</tr>
<tr>
<td>Level of autonomy</td>
<td>65.6  27.3  4.4  2.6</td>
<td>48.9  35.9  11.3  3.9</td>
<td>29.8  43.6  18.5  8.2</td>
</tr>
<tr>
<td>Respect from other colleagues</td>
<td>55.1  41.0  2.6  0.9</td>
<td>41.9  49.3  7.0  1.8</td>
<td>35.1  52.7  10.0  2.2</td>
</tr>
<tr>
<td>Sense of value for what you do</td>
<td>57.3  33.5  7.5  1.8</td>
<td>43.0  40.5  12.3  4.2</td>
<td>35.1  41.7  18.5  4.7</td>
</tr>
<tr>
<td>Respect from physician colleagues</td>
<td>57.7  35.7  4.9  1.3</td>
<td>33.8  48.9  10.6  5.6</td>
<td>30.7  45.1  16.3  6.9</td>
</tr>
<tr>
<td>Opportunities for professional development</td>
<td>36.6  43.6  14.5  4.4</td>
<td>25.4  50.4  16.9  6.7</td>
<td>20.7  47.7  22.6  8.5</td>
</tr>
<tr>
<td>Input into organizational/practice policies</td>
<td>26.9  45.4  17.6  7.9</td>
<td>16.6  45.1  26.4  10.6</td>
<td>13.2  47.7  24.5  12.5</td>
</tr>
</tbody>
</table>
Geography

Survey participants are asked to provide “the zip code(s) where you practice in your principal position.” This request, with a nearly 88% response rate, serves as the basis for geographic information presented in this section. We translate workplace zip codes into county-based views of the APN workforce. Respondents entering two or three zip codes are allocated proportionately across the corresponding counties. There are 102 counties in Illinois.

Figure 13 displays population across Illinois counties and Figure 14 presents APN survey respondents across Illinois counties. Given the geography of population density in Illinois it is neither surprising nor particularly informative to know that APNs are generally clustered where people are generally clustered. A more relevant measure would display APN workforce density as a ratio to population.

Figure 15 presents such a measure of APN density (apnsd) in terms of APN survey respondents per 10,000 population. By this measure at the county level some of the highest densities around the center of the state as opposed to the population-heavy northeast corner. Figure 16 adds indicators for county-level designations as medically-underserved areas.
Figure 13:
Figure 14:
Figure 15:
Figure 16:
Appendix A

List of Survey Questions

1. Do you have a current certification, and/or licensure, from a State Board of Nursing to practice as an Advanced Practice Nurse (APN)?
   
   Yes  No

2. In which state(s) or U.S. territories do you currently have certification/licensure/recognition to practice as an APN? (Select up to 3)

3. Which educational program(s) did you complete for your APN preparation? (Check all that apply)
   
   Certificate Program (no master’s degree)  Master’s degree  Post Master’s Certificate, Doctor of Nursing Practice degree  Other (please specify)

4. In what year did you complete your initial APN education program?

5. Please indicate your APN Specialty for your primary position -- where you work the most hours and are compensated monetarily
   
   CRNA CNS CNM CNP

6. In which area(s) have you ever received certification from a national certifying organization for APNs? (Check all that apply)
   
   Acute care, adult  Acute care, pediatric  Adult  Gerontology  Family  Pediatric  Neonatal  Psych/mental health  Women’s health  None  Other (please specify)

7. If you are not working as an APN, what are the reasons? (Check all that apply)
   
   Overall lack of APN jobs/practice opportunities, Lack of APN jobs/practice opportunities in desired location, Lack of APN jobs/practice opportunities in desired type of facility, Lack of APN jobs/practice in desired specialty, Limited scope of practice for APNs in the state where practice is desired, Denied APN job due to lack of experience or qualification, Inadequate salary/compensation, Maternity/parenting/family leave, Poor health or disability, Choose not to work at this time, Retired, Working outside the nursing field, Other

   If you selected Working outside the nursing field or Other, please explain:

8. Do you volunteer as an APN? (i.e. work for free in a clinic, teach for free, free school physicals, etc.) Yes  No

9. How many total hours per month do you volunteer as an APN?
10. Do you work for pay in nursing, as a Registered Nurse (RN) or as an APN? Yes No

11. For this survey, your principal position refers to the RN or APN position in which you work the most hours per week and are compensated monetarily. Do not include volunteer positions or adjunct faculty status.

Which is your principal position?

**APN Position** - APN in clinical practice

**APN Position** - Faculty requiring an APN credential

**APN Position** - Researcher requiring an APN credential

**APN Position** - Administrator requiring an APN credential

**APN Position** - Clinical Educator

**Nursing position not requiring APN credential** - RN staff nurse

**Nursing position not requiring APN credential** - Faculty

**Nursing position not requiring APN credential** - Administrator/Manager

**Nursing position not requiring APN credential** - Patient care coordinator

**Nursing position not requiring APN credential** - Other APRN role

**Nursing position not requiring APN credential** - Researcher

**Nursing position not requiring APN credential** - Consultant Other (please specify "APN" or "not requiring APN" and job function):

12. In what type of setting do you work in your principal position? (Please select one)

**Ambulatory Settings** - Private physician office/practice

**Ambulatory Settings** - Private APN office/practice

**Ambulatory Settings** - Nurse Managed clinic

**Ambulatory Settings** - Retail based clinic

**Ambulatory Settings** - Urgent care clinic

**Ambulatory Settings** - Ambulatory surgery center

**Ambulatory Settings** - Federal clinic (FQHC, VA, Military, NIH, IHS)

**Hospital Settings** - Hospital inpatient unit

**Hospital Settings** - Hospital outpatient clinic (not an ED)
Hospital Settings - Hospital emergency department

Hospital Settings - Federal Hospital (Military, VA, NIH, IHS)

Hospital Settings - Hospital Administration

Hospital Settings - Hospital Educator/Education Staff and/or Patients

Long Term and Elder Care - Long-term care facility

Long Term and Elder Care - Hospice

Long Term and Elder Care - Home care agency

Public or Community Health - Community clinic

Public or Community Health - Correctional facility

Public or Community Health - Health department

Public or Community Health - Mental health center

Public or Community Health - Rural health clinic

Other Settings - Academic (university/college) education program

Other Settings - Health maintenance organization/managed care

Other Settings - Occupational/employee health

Other Settings - School/college health service Other (please describe)

13. What is the ZIP code(s) where you practice in your principal position? You can enter up to three ZIP codes, each followed by a comma.

14. In a typical week, how many hours do you work in your principal position?

15. Please estimate your 2013 pre-tax annual earnings from your principal position. Include overtime, on-call earnings, and bonuses.

16. Do you have a National Provider Identifier (NPI) number? Yes  No

17. Do you, or whoever handles accounting for you, bill under your NPI number?

Yes  No  I don’t know

18. How satisfied are you with each of the following aspects of your principal position?

Very Satisfied

Satisfied
Dissatisfied
Very Dissatisfied
Not Applicable
Proportion of time in patient care
Patient load
Patient mix
Amount of paperwork required
Level of autonomy
Number of hours worked, including overtime
Salary/benefits
Sense of value for what you do
Respect from physician colleagues
Respect from other colleagues
Amount of administrative support
Opportunities for professional development
Input into organizational/practice policies

19. What is your overall level of satisfaction with your principal position?
   Very Satisfied
   Satisfied
   Dissatisfied

20. Do you plan to leave your principal position?
   Yes, will leave in 2014
   Yes, will leave in 1-2 years
   No plans to leave in next 2 years
   Undecided

21. Approximately when do you plan to retire from nursing and APN work?
   In 2014
22. Aside from your principal position, are you working for compensation in any other nursing (RN or APN) positions?

Yes No

For this survey, your secondary position refers to the RN or APN position in which you work the second most hours per week and are compensated monetarily. Do not include volunteer positions or adjunct faculty status.

23. Which is your secondary position?

- **APN Position** - APN in clinical practice
- **APN Position** - Faculty requiring an APN credential
- **APN Position** - Researcher requiring an APN credential
- **APN Position** - Administrator requiring an APN credential
- **APN Position** - Clinical Educator

- **Nursing position not requiring APN credential** - RN staff nurse
- **Nursing position not requiring APN credential** - Faculty
- **Nursing position not requiring APN credential** - Administrator/Manager
- **Nursing position not requiring APN credential** - Patient care coordinator
- **Nursing position not requiring APN credential** - Other APRN role
- **Nursing position not requiring APN credential** - Researcher
- **Nursing position not requiring APN credential** - Consultant  Other (please specify "APN" or "not requiring APN" and job function):

24. In what type of setting do you work in your secondary position? (Check only one)

- **Ambulatory Settings** - Private physician office/practice
- **Ambulatory Settings** - Private APN office/practice
- **Ambulatory Settings** - Nurse Managed clinic
- **Ambulatory Settings** - Retail based clinic
25. What is the ZIP code(s) where you practice in your secondary position? You can enter up to three ZIP codes, each followed by a comma.

26. In a typical week, how many hours do you work in your secondary position?

27. Please estimate your 2013 pre-tax annual earnings from your secondary position. Include overtime, on-call earnings, and bonuses.

The following questions refer only to your APN employment. You may have referred to
your APN position as your principal or secondary position in a previous section.

28. Do you work for pay as an APN?

Yes

No

For this survey, your principal APN position refers to where you work the most APN hours per week.

29. Functioning in your principal APN position, check the one term below that best describes the focus of your practice/facility. Choose from Primary Care, Subspecialties, Surgical Specialties, Other Specialties or check "Not working in a clinical specialty".

Not working in a clinical specialty

Primary Care - Internal Medicine

Primary Care - Family Practice

Primary Care - Geriatrics

Primary Care - General Pediatrics

Subspecialties - Cardiology

Subspecialties - Endocrinology

Subspecialties - Gastroenterology

Subspecialties - Hematology/Oncology

Subspecialties - Infectious Disease

Subspecialties - Pulmonary/Respiratory

Subspecialties - Renal/Nephrology

Subspecialties - Rheumatology

Subspecialties - OB/GYN Women's Health

Surgical - General Surgery

Surgical - Urological Surgery

Surgical - Orthopedic Surgery

Surgical - Other Surgery

Other Specialty - Allergy & Immunology
30. In your principal APN position, do you have the title of "Hospitalist?"

   Yes  No

31. Functioning in your principal APN position, what percentage of your time is spent in each of the following roles? The total must equal 100%.

   Patient Care/Documentation
   Teaching/Precepting/Orienting
   Supervision/Management/Administration
   Other

32. Functioning in your principal APN position, do you provide direct patient care?
Yes

no

33. Regarding your principal APN position, for how many patients do you provide the following services?

All patients

Most Patients

Some Patients

Few Patients

No Patients

Diagnosis, treatment, and management of acute illnesses

Diagnosis, treatment, and management of chronic illnesses

Conduct physical examinations and obtain medical histories

Order, perform, and interpret lab tests, x-rays, EKGs, and other diagnostic studies

Deliver anesthesia

Provide psychotherapy

Prescribe drugs for acute and chronic illnesses

Provide preventative care, including screening and immunizations

Perform procedures

Counsel and educate patients and families

Provide care coordination

Make referrals

Participate in practice improvement activities

34. Which of the following best describes your billing arrangements for your principal APN position?

Bill under my provider number

Bill under my clinic/facility number

Bill under a physician’s provider number

No billing, cash only
No billing, grant supported/free clinic

Other (please specify)

35. How often is a physician present on site to discuss patient problems as they occur in your principal APN position?

0% of the time
1%-25% of the time
26%-50% of the time
51%-75% of the time
76%-100% of the time

36. What type of professional relationship do you have with the physician(s) in your principal APN position? (Select all that apply)

No physician in my practice
Collaborate with a physician at another site
Collaborate with a physician on site
Equal colleagues/no hierarchy
S/he is the medical director who oversees all of our practice and I am accountable to the medical director, as are all other providers
Hierarchical/supervisory in which I must accept his/her clinical decision about the patients I see
Physician sees and signs off on the patients I see
Physician cosigns orders and/or progress notes
Other (please specify)

37. Do you pay your collaborating MD a fee?

Yes
No
Do not know

38. If you do pay your collaborating MD a fee, how would you define the fee schedule? (Check all that apply)

Monthly fee
One-time fee
Percentage
Other fee (please describe)

39. To what extent would you agree or disagree with the following: In my principal APN position, I am allowed to practice to the fullest extent of my state’s legal scope of practice.

Strongly Agree
Agree
Disagree
Strongly Disagree

40. To what extent would you agree or disagree with the following: In my principal APN position, my APN skills are being fully utilized.

Strongly Agree
Agree
Disagree
Strongly Disagree

41. How are you paid in your principal APN position? (Select all that apply)

Annual salary
By the hour
Percentage of billing
Other (please specify)

42. Considering all of your APN positions, how many patients do you see in a typical week?

43. Considering all of your APN positions, do you have a panel of patients you manage and for whom you are the primary provider?

Yes
No

44. If you have a panel, how many patients are on your panel? (If you do not have a panel, leave question blank)
45. Do you take evening or weekend call for any of your APN positions?
Yes
No

46. Are you compensated for taking evening or weekend call for any of your APN positions? Yes
No

47. Do you have hospital admitting privileges?
Yes
No

48. Are you covered by malpractice insurance?
Yes
No

49. Who pays for your malpractice insurance?
Self
Employer
Both

50. Do you have prescriptive authority?
Yes
No

51. Why don't you have prescriptive authority?
In process of applying
MD or other APN writes all my prescriptions
Other (please specify)

52. Do you currently have a personal drug enforcement administration (DEA) number?
Yes
No

53. Do you have a controlled substance license in Illinois?
54. Regarding patients for whom you provide care, who pays the majority of the cost?

- Medicare
- Medicaid
- Private Insurance
- No insurance/self pay
- Not involved in direct Patient care

55. Do you and/or your practice accept Medicaid?

- Yes
- No

56. Are you proficient in a language other than English?

- Yes
- No

57. Do you utilize this language in your current position?

- Yes
- No

58. Please list all languages in which you are proficient.

- Language 1
- Language 2
- Language 3
- Language 4
- Language 5
- Language 6
- Language 7

59. What is your gender?
Female
Male

60. What is your year of birth?

61. Are you of Latino or Hispanic ethnicity?

Yes
No

62. Which one or more of the following would you use to describe your race? (Check all that apply)

American Indian or Alaska Native
Asian
Black or African-American
Native Hawaiian or Other Pacific Islander
Caucasian

63. Which of the following best describes your current relationship status?

Married
Widowed
Divorced
Separated
In a domestic partnership or civil union
Single, but cohabiting with a significant other
Single, never married

64. Please check all educational degree(s) you have earned.

Diploma in Registered Nursing
Associate degree - Nursing
Associate degree - Non-nursing
Baccalaureate degree - Nursing
Baccalaureate degree - Non-nursing
Master's degree - Nursing
Master's degree - Non-nursing
Doctorate of Nursing Practice (DNP)
PhD or other Doctorate - Nursing
Doctorate - Non-nursing
Other (please specify)

65. In what year did you obtain your initial U.S. licensure as an RN?

66. In what year did you obtain your initial U.S. licensure as an APN?

67. Is your APN license lapsed or inactive?
   Yes
   No

68. What is your home address ZIP code?

69. Please add any comments or concerns about your APN position here:

70. Would you be willing to share your e-mail address to receive the results of the survey?
   Yes
   No

71. Please provide your email address here.

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