Physician compensation models influence health care cost, quality, and physician satisfaction and retention in important ways.\(^1\)\(^,\)\(^2\) Physicians who are paid to provide more services typically do so, leading to increased health care costs without necessarily demonstrating improved patient outcomes.\(^3\)\(^,\)\(^4\) These productivity-based models of physician compensation are aligned with a fee-for-service payment model with dollars flowing to physicians in the same way that dollars flow into practice.

Medicare and other payers have recognized the problems inherent to incentivizing quantity without regard to quality in health care and are using reimbursement models such as per-member-per-month fees and care coordination payments in addition to fee-for-service rendered. As health care delivery organizations evolve to keep up with these changes, they have moved toward employing more physicians and have shifted their focus toward improving value and patient satisfaction rather than increasing volume. The structure of primary care physician compensation, however, has largely lagged behind these changes and in many cases still incentivizes quantity (usually productivity as measured by relative value units [RVUs]) over quality.\(^5\)\(^,\)\(^6\)

From the Department of Family Medicine and Community Health (Drs Lochner, Kamnetz, and Pandhi) and Department of Medicine (Dr Trowbridge), University of Wisconsin; and Primary Care Academics Transforming Healthcare Collaborative, UW Health, Madison, WI (Drs Lochner, Trowbridge, Kamnetz, and Pandhi)

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**Background and Objectives:** Primary care physician compensation structures have remained largely volume-based, lagging behind changes in reimbursement that increasingly include population approaches such as capitation, bundled payments, and care management fees. We describe a population health-based physician compensation plan developed for two departmental family medicine faculty groups (residency teaching clinic faculty and community clinic faculty) along with outcomes before and after the plan's implementation.

**Methods:** An observational study was conducted. A pre-post email survey assessed satisfaction with the plan, salary, and salary equity. Physician retention, panel size, and relative value unit (RVU) productivity metrics also were assessed before and after the plan's implementation.

**Results:** Before implementation of the new plan, 18% of residency faculty and 33% of community faculty were satisfied or very satisfied with compensation structure. After implementation, those numbers rose to 47% for residency physicians and 74% for community physicians. Satisfaction with the amount of compensation also rose from 33% to 68% for residency faculty and from 26% to 87% for community faculty. For both groups, panel size per clinical full-time equivalent increased, and RVUs moved closer to national benchmarks. RVUs decreased for residency faculty and increased for community faculty.

**Conclusions:** Aligning a compensation plan with population health delivery by moving rewards away from RVU productivity and toward panel management resulted in improved physician satisfaction and retention, as well as larger panel sizes. RVU changes were less predictable. Physician compensation is an important component of care model redesign that emphasizes population health.

(Fam Med 2016;48(6):459-66.)
The misalignment between financial rewards and organizational goals has the potential to affect physician morale and engagement in their work. Physician satisfaction has been declining in primary care. Although compensation is one of many issues that play a role in physician satisfaction, it is a factor that organizations can address. The customization of compensation models incentivizing work over volume for different groups within a practice setting has not been explored.

To address this gap, we describe in this paper a transition from a single outdated compensation plan to two new models of clinical compensation for a Department of Family Medicine and Community Health (DFMCH) at a large Midwestern academic medical center. Specifically, we describe the development and implementation of physician compensation plans for two faculty groups—those who practiced in either residency teaching clinics or community clinics. We assessed physician satisfaction, retention, measures of physician work, and salaries before and after the compensation model change in 2013. We hypothesized that tailoring the plans to the different values of the two different groups would result in increased satisfaction and retention. We also hypothesized that a lower emphasis on RVU production would result in lower RVU generation.

**Methods**

**Setting**

The University of Wisconsin–Madison DFMCH is one of the largest family medicine departments in the United States with four campuses in urban and rural communities throughout Wisconsin. The DFMCH is part of UW Health, a public academic health system consisting of a school of medicine and public health, a nonprofit hospital, and a large multispecialty physician practice group.

The data regarding compensation in this study involves faculty at four residency training sites (32 faculty physicians) and 10 community practices (52 faculty physicians) in Dane County, WI. In 2011, at the beginning of this study, revenue sources for these clinics were 65.3% fee-for-service and 34.7% capitation. The percentage of capitated revenue has increased, and in 2014, revenue sources were 59.5% fee-for-service and 40.5% capitation. This project was exempt from review by the Institutional Review Board because it did not constitute research as defined under 45 CFR 46.102(d).

**Impetus for Change**

Several factors motivated the DFMCH to change its physician compensation structure away from one primarily based on RVU productivity. First, in 2009–2011 the DFMCH had significant attrition of physicians to other local health systems that had built and expanded primary care systems in response to the passage of the Affordable Care Act. Compensation in the DFMCH was suddenly lower than local market rates, resulting in low morale. Second, UW Health created a new job description for primary care physicians that focused on management of a panel of patients with an emphasis on team-based care and population-based care instead of on RVU productivity. As part of this shift, time was built into clinician schedules to address care needs outside of face-to-face visits. A target panel size for primary care physicians was set at 1,800 weighted panel members per 1.0 full-time equivalent (FTE). In 2011, DFMCH engaged a national consulting firm to survey its faculty regarding compensation. Findings of the anonymous survey included overall low satisfaction with both the compensation plan structure and total compensation received. Both residency and community clinic physicians voiced concern that the sole focus on RVU productivity was no longer accurate as the primary measurement of work. Both groups also expressed a desire to have separate compensation plans for physicians primarily delivering clinical care and physicians who primarily focused on education.

**Creating a New Compensation Plan Differentiating Residency and Community Clinical Work**

Based on this input, UW Health developed a template for the DFMCH, the Division of General Internal Medicine, and the Division of General Pediatrics and Adolescent Medicine that provided a salary for clinical work based on both panel size and a work metric (RVUs). Building on this template, the DFMCH’s compensation committee crafted two new clinical compensation plans flexible enough to address different job descriptions and values. Residency and community clinic faculty representatives on the committee discussed their group’s core values and guiding principles for fair compensation. Our department was unique in creating different plans for faculty with different roles.

Residency faculty, though practicing across four different clinic sites, viewed themselves as a single practice and wished to maintain a focus on group performance rather than individual productivity measures. They needed a clinical compensation system that accounted for balancing part-time clinical work with other responsibilities, such as teaching, shared patient care with practice partners, and supervising resident care in a way that did not create incentives for moving patients out of resident panels.

In contrast, community faculty often taught medical students in their offices but rarely received salary support for these academic duties. While they did share some service responsibilities (call and inpatient-attending), the 10 clinics were mostly geographically and culturally independent of each other. These physicians wanted less emphasis on RVUs while still financially rewarding physicians who were present in clinic providing patient care.
**Compensation Formulas**

The clinical compensation formulas for each of the groups include two main components: (1) salary based on panel size and (2) a work metric based on RVUs. Panel size is calculated based on the number of patients assigned to a primary clinician at a given clinic who have had a visit within UW Health within the past 3 years. This absolute number is then multiplied by a weighting factor based on age, gender, and insurance status. This weighting factor was developed by examining organizational data to understand factors that predicted the number of office visits. For example, a 21-year-old commercially insured man has a weighting factor of 0.59 while a 45-year-old woman with Medicare insurance has a weighting of 2.22. Details of the creation of this weighting factor are outside the scope of this paper.

The relative contribution of the salary and work component (RVUs) differs for residency and community faculty as shown in Figure 1. For the residency faculty, the total dollars available for clinical compensation is determined by pooling all patients assigned to residency sites. Then, 80% of the pool is distributed based on proportional clinical FTE (individual clinical FTE/total residency faculty clinical FTE), and 20% of the pool is distributed based on proportional RVU generation (individual RVUs/total residency faculty clinical RVUs). In contrast, for the community faculty, the total dollars available for compensation is determined for each clinic separately based on panel size. Then, also at the individual clinic level, 50% of the pool is distributed based on proportional panel size (individual panel size/clinic total panel size) and 50% distributed based on proportional RVU generation (individual RVUs/clinic combined RVUs).

The key differences between the compensation plans and accompanying rationale based on the different values between the community and residency faculty groups are shown in Table 1.

**Evaluation**

Outcomes were measured from 2011 through 2015. These metrics included change in satisfaction, perceived equity, workforce stability, panel size, and RVU productivity. We also tracked changes in compensation and national benchmarks for median family physician salary and RVU.

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**Figure 1: Compensation Calculations for Residency and Community Faculty With Examples**

<table>
<thead>
<tr>
<th>Residency Faculty Compensation</th>
<th>Community Faculty Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National benchmark</strong></td>
<td><strong>National benchmark</strong></td>
</tr>
<tr>
<td>family medicine salary</td>
<td>family medicine salary</td>
</tr>
<tr>
<td>$220,000</td>
<td>$220,000</td>
</tr>
<tr>
<td><strong>Target panel size</strong></td>
<td><strong>Target panel size</strong></td>
</tr>
<tr>
<td>1,800 patients</td>
<td>1,800 patients</td>
</tr>
<tr>
<td><strong>Total panel size for all residency clinics</strong></td>
<td><strong>Total panel size for all clinic</strong></td>
</tr>
<tr>
<td>32,000 patients across 4 clinics</td>
<td>7,000 patients at clinic</td>
</tr>
<tr>
<td><strong>Residency Compensation Pool</strong></td>
<td><strong>Community Compensation Pool</strong></td>
</tr>
<tr>
<td>$3,911,111</td>
<td>$855,556</td>
</tr>
</tbody>
</table>

80% panel-based compensation

- Individual clinical FTE
  - Total clinical FTE for all residency faculty
  
  - 0.5 FTE patient care + 0.1 FTE precepting
    - 18 FTE
      - across 4 clinics
    - 80% of compensation pool

20% RVU-based compensation

- Individual RVU productivity
  - Total RVU productivity for all residency faculty
  
  - 3,000 personal RVUs
    - 80,000 RVUs
      - across 4 clinics
    - 20% of compensation pool

<table>
<thead>
<tr>
<th>Total clinical compensation for residency physician with 0.6 clinical FTE</th>
<th>Total compensation for community physician with 1.0 FTE and a panel size of 2,000 patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>$133,629</td>
<td>$217,284</td>
</tr>
</tbody>
</table>

50% panel-based compensation

- Individual panel size
  - Total panel size at clinic
  
  - 2,000 patients
    - 7,000 patients at clinic
    - 18,000 RVUs
      - at clinic
    - 50% of compensation pool

50% RVU-based compensation

- Individual RVU productivity
  - Total RVU productivity at clinic
  
  - 4,000 personal FTE
    - 18,000 RVUs
      - at clinic
    - 50% of compensation pool

---

FTE—full-time equivalent, RVU—Relative Value Unit

* Individual clinical FTE is composed of direct patient care and resident precepting and was defined as 27 hours in clinic each week and 13 hours providing non-face-to-face care.
productivity through data obtained from the payroll and business office.

Satisfaction With Compensation Plan and Perceived Equity
Satisfaction with regard to compensation and perceived equity was assessed in 2011 and 2014, before and after the implementation of the new compensation plan in 2013. All DFMCH physicians were asked two questions regarding satisfaction as part of an email survey: (1) “In general, how satisfied are you with your compensation plan structure?” (2) “In general, how satisfied are you with your annual salary?” Response categories were on a Likert scale of 1–5 (very dissatisfied, dissatisfied, neutral, satisfied, and very satisfied). Another question addressed equity, asking respondents to rank their existing compensation’s fairness in relation to peers in similar specialties outside of the organization. A similar Likert scale was used: very unfair, unfair, neutral, fair, very fair. Survey data were analyzed using the Mann-Whitney test comparing baseline to follow-up responses at the group level. P<.05 was the threshold at which responses were considered statistically significant.

Workforce Stability
Workforce stability was assessed by tallying the number of physicians who left DFMCH to work for local competitors not in the same health system before and after implementation of the new compensation plans.

Panel Size and Productivity Metrics
Weighted panel size (calculated as described above) and RVUs were examined from 2011 through 2015, before and after the compensation plan change. RVUs were calculated using the Medicare Resource-Based Relative Value Scale. RVUs were reported to physicians monthly. Faculty did not get credit for RVUs generated by residents in the clinic. One clinical FTE was defined as 27 hours in clinic each week and 13 hours providing non-face-to-face care.

RVU per FTE was calculated by using the total RVUs documented by DFMCH physicians divided by the clinical FTE (for faculty this includes time spent supervising residents in the clinic) of these physicians. We compared RVU per FTE data from 2011, before implementation of the compensation plan, to 2014 RVU per FTE data, the period following implementation of the compensation plan.

Results

Satisfaction With Compensation Plan and Perceived Equity
Response rates for the survey were 67% for residency physicians and 100% for community physicians at baseline in 2011 and 59% and 60% respectively at follow-up in 2014. As shown in Table 2, satisfaction with both compensation plan structure and annual salary received was low at baseline in both residency and community physicians (18%–33% satisfied or very satisfied) and significantly improved after implementation of the new compensation plans.

<table>
<thead>
<tr>
<th>Compensation Plan Component</th>
<th>Residency</th>
<th>Community</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pool of dollars available for clinical compensation</td>
<td>Based on panel size of four clinics pooled together</td>
<td>Based on panel size for each individual clinic</td>
<td>Residency clinics view themselves as one group practice, sharing responsibility for caring for the entire panel together; community clinics view themselves as separate practices.</td>
</tr>
<tr>
<td>Panel size and allocation</td>
<td>80% of salary is based on panel size. Panel is allocated based on clinical FTE rather than actual individual faculty panel size.</td>
<td>50% of salary is based on panel size. Panel is allocated based on individual physician panel size.</td>
<td>Using clinical FTE (which includes precepting time) to assign panel size to residency faculty allows residents’ patients to be allocated across the faculty based on the amount of time a physician spends in the clinic caring for those patients. In the community clinics, physicians are credited for their personal panel.</td>
</tr>
<tr>
<td>RVU production</td>
<td>20% of salary is based on RVU productivity.</td>
<td>50% of salary is based on RVU productivity.</td>
<td>Residency faculty wanted to de-emphasize RVU productivity and instead focus on panel management as the key determinant of compensation while community physicians wanted to value panel size and RVU productivity equally.</td>
</tr>
</tbody>
</table>

RVU—Relative Value Units, FTE—full-time equivalent
percentages improved significantly for both groups after implementation of the new compensation plan (16% residency, 23% community). All differences were significant at the level of \( P < .05 \) or better. Median compensation increased during this time period by 22% for residency physicians and 33% for community physicians. For this same time period, a blended average national benchmark median family physician salary used by DFMCH (including data from the Medical Group Management Association [MGMA], the American Medical Group Association [AMGA], and McGladrey & Pullen) increased by 12%.

Local competitor salaries had risen prior to 2011 and remained stable through 2014. The rise in DFMCH salaries made faculty compensation more competitive within the local market.

Workforce Stability
Between late 2009 and early 2011, 12 physicians left DFMCH practices to work for local competitors (16%). Since the implementation of the new compensation plan in January 2013 (retroactive to July 2012) through January 2015, no DFMCH physicians have left to work for local competitors. We excluded physicians who left due to retirement or moved out of the local area.

### Table 2: Changes in Physician Satisfaction With Compensation Plan, Salary, and Fairness

<table>
<thead>
<tr>
<th>Question</th>
<th>Group (Year)</th>
<th>Very Dissatisfied (%)</th>
<th>Dissatisfied (%)</th>
<th>Neutral (%)</th>
<th>Satisfied (%)</th>
<th>Very Satisfied (%)</th>
<th>( P ) Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with compensation plan structure</td>
<td>Community (pre)</td>
<td>7 (17)</td>
<td>13 (31)</td>
<td>8 (19)</td>
<td>11 (26)</td>
<td>3 (7)</td>
<td>( P = .003 )</td>
</tr>
<tr>
<td></td>
<td>Community (post)</td>
<td>4 (13)</td>
<td>3 (10)</td>
<td>1 (3)</td>
<td>14 (45)</td>
<td>9 (29)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residency (pre)</td>
<td>4 (12)</td>
<td>17 (51)</td>
<td>6 (18)</td>
<td>6 (18)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residency (post)</td>
<td>1 (5)</td>
<td>3 (16)</td>
<td>6 (32)</td>
<td>7 (37)</td>
<td>2 (11)</td>
<td>( P = .004 )</td>
</tr>
<tr>
<td>Satisfaction with annual salary received</td>
<td>Community (pre)</td>
<td>5 (12)</td>
<td>17 (41)</td>
<td>9 (21)</td>
<td>10 (24)</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community (post)</td>
<td>0 (0)</td>
<td>2 (7)</td>
<td>2 (7)</td>
<td>12 (39)</td>
<td>15 (48)</td>
<td>( P &lt; .001 )</td>
</tr>
<tr>
<td></td>
<td>Residency (pre)</td>
<td>2 (6)</td>
<td>15 (45)</td>
<td>5 (16)</td>
<td>11 (33)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residency (post)</td>
<td>1 (5)</td>
<td>1 (5)</td>
<td>4 (21)</td>
<td>8 (42)</td>
<td>5 (26)</td>
<td>( P = .001 )</td>
</tr>
<tr>
<td>Perception of salary equity*</td>
<td>Community (pre)</td>
<td>9 (27)</td>
<td>18 (55)</td>
<td>2 (6)</td>
<td>3 (9)</td>
<td>1 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community (post)</td>
<td>0 (0)</td>
<td>3 (16)</td>
<td>7 (37)</td>
<td>4 (21)</td>
<td>5 (26)</td>
<td>( P &lt; .001 )</td>
</tr>
<tr>
<td></td>
<td>Residency (pre)</td>
<td>8 (19)</td>
<td>15 (36)</td>
<td>7 (17)</td>
<td>10 (24)</td>
<td>2 (5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residency (post)</td>
<td>3 (10)</td>
<td>4 (13)</td>
<td>13 (42)</td>
<td>3 (10)</td>
<td>8 (26)</td>
<td>( P = .022 )</td>
</tr>
</tbody>
</table>

Due to rounding, not all percentages add to 100.

In 2011 (pre), 42 community and 33 residency responses were recorded. In 2013 (post), 31 community responses and 19 residency responses were recorded.

* For this question, agree indicates the number of individuals who believed that their salary was unfair or very unfair on a corresponding 1–5 Likert scale of (very unfair, unfair, neutral, fair, and very fair).
both residency and community faculty (Table 3). Both groups are now close to the organizational target of 1,800 weighted panel members per 1.0 FTE.

Annual RVUs per FTE for residency faculty decreased in the year following the implementation of the new compensation plan and stabilized at a level close to a blended average national benchmark, also including data from MGMA, AMGA, and McGladrey & Pullen (Table 4). This was a 22% decrease from 6,099 in 2011 to 4,723 in 2014. During this same period, RVUs per FTE increased by 22.6% for community faculty, from 3,513 to 4,307. The blended average national benchmark numbers for family medicine annual RVUs per FTE were 4,796 in 2011 and 4,828 in 2014 (0.01% increase).

Discussion

We found that changes to the structure of physician compensation in the DFMCH resulted in important changes in physician satisfaction, physician retention, panel size per clinical FTE, and work RVU productivity. Physician satisfaction, perceived compensation equity, and retention improved significantly. Additionally, panel size per FTE increased, and RVUs moved closer to the national benchmark (an absolute decrease for residency faculty and increase for community faculty). While it could be argued that satisfaction improved simply due to the rising salaries for physicians over this time, physicians also reported that their satisfaction with the structure of their compensation was improved. Physician satisfaction has been highly correlated with autonomy in prior studies. It is highly probable that the involvement of physicians in crafting the new compensation plans and the tailoring of these plans to the structure and values of the two groups were key to its success.

Not all physicians, however, were satisfied with the compensation plans. Some smaller community clinics initially had more physicians than were needed to care for their panel sizes. This resulted in initially lower salaries for those physicians, and in several instances, the transfer of physician FTE out of those practices and into others with higher physician FTE need. Additionally, a significant minority of residency physicians voiced a preference to be paid a flat salary rather than a variable amount.

As was expected, an increased emphasis on panel size and a lesser emphasis on RVU productivity as a driver for compensation were correlated with a decline in RVU productivity among residency faculty over the first 2 years of the new compensation plan, while panel size per FTE increased. Before the change in the compensation plan, residency faculty had high RVU productivity for their FTE—127% of the national benchmark. This can be viewed positively—having faculty members who work hard and are highly productive in their clinical work. However, it could also be seen as problematic as faculty members may be overly incentivized to add patient care sessions in a way that was detrimental to their other job duties, such as teaching and scholarship. In fact, this is what we think was going on with the structure of the prior RVU-based system, which included incentives based on achieving a “percent to target” RVU goal. For residency faculty with lower clinical FTEs, the absolute target RVU total was lower than for full-time clinicians so adding even a single clinic session could account for a significant relative increase in their RVU productivity. Residency faculty RVU productivity now sits at 98% of benchmark—lower than before but in line with national standards. Importantly, resident visits in the clinics did not decline; we continue to meet Residency Review Committee requirements for patient volume.

Table 3: Changes Over Time in Weighted Panel Sizes Per FTE

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panel size</td>
<td>72,681</td>
<td>75,012</td>
<td>78,261</td>
<td>82,632</td>
</tr>
<tr>
<td>Clinical FTE</td>
<td>51.83</td>
<td>45.77</td>
<td>41.96</td>
<td>44.9</td>
</tr>
<tr>
<td>Panel size per 1.0 FTE</td>
<td>1,402</td>
<td>1,639</td>
<td>1,865</td>
<td>1,840</td>
</tr>
<tr>
<td>Residency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panel size</td>
<td>33,475</td>
<td>33,588</td>
<td>33,608</td>
<td>34,321</td>
</tr>
<tr>
<td>Clinical FTE</td>
<td>20.28</td>
<td>21.02</td>
<td>18.71</td>
<td>18.23</td>
</tr>
<tr>
<td>Panel size per 1.0 FTE</td>
<td>1,650</td>
<td>1,598</td>
<td>1,796</td>
<td>1,883</td>
</tr>
</tbody>
</table>

FTE—full-time equivalent

* New compensation plan started January 2013, retroactive to July 2012.

± This includes physician clinical FTE, not including resident, fellow, and APP FTE. For faculty this number reflected both direct patient care and resident precepting.
Table 4: Changes in Relative Value Units Per Full-Time Equivalent*

<table>
<thead>
<tr>
<th></th>
<th>2011 RVUs Per FTE</th>
<th>2012 RVUs Per FTE</th>
<th>2013 RVUs Per FTE</th>
<th>2014 RVUs Per FTE</th>
<th>RVU Variance 2011–2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>National FM RVU benchmark±</td>
<td>4,796</td>
<td>4,878</td>
<td>4,901</td>
<td>4,828</td>
<td>+0.01%</td>
</tr>
<tr>
<td>Residency clinics</td>
<td>6,099</td>
<td>6,252</td>
<td>4,786</td>
<td>4,723</td>
<td>-22.6</td>
</tr>
<tr>
<td>Residency clinics percentage of FM benchmark</td>
<td>127</td>
<td>128</td>
<td>98</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>Community clinics</td>
<td>3,513</td>
<td>4,335</td>
<td>4,597</td>
<td>4,307</td>
<td>+22.6%</td>
</tr>
<tr>
<td>Community clinics percentage of FM benchmark</td>
<td>73</td>
<td>89</td>
<td>94</td>
<td>89</td>
<td></td>
</tr>
</tbody>
</table>

RVU—Relative Value Units, FTE—full-time equivalent, FM—family medicine

* New compensation plan started January 2013, retroactive to July 2012.
± National family medicine RVU benchmarks were obtained from data from the Medical Group Management Association, the American Medical Group Association, and McGladrey & Pullen.

For our large academic institution, increasing panel size and local market share was important. By aligning our compensation plan with this metric in addition to RVUs, we were able to help our institution achieve its financial and educational targets, despite some loss of RVU productivity in residency teaching clinics.

At baseline, community faculty had much lower RVU productivity on average compared to the national benchmark. The reason for this is likely multifactorial. A few smaller clinics had over-hired physicians compared to volume demands, leading to low RVU production for those physicians and their colleagues. There were also some physicians who chose to see fewer patients per session in the clinic and voiced contentment with the lower salary that accompanied this lower RVU production. The DFMCH was concerned (for financial reasons) that implementing a compensation plan with a decreased emphasis on RVU productivity would result in further lowering of RVU productivity, but this did not occur. For the DFMCH, the preservation of 50% of salary based on RVU productivity (compared to 20% for residency faculty) appears to be an adequate incentive to prevent a drop in RVU productivity. This is important information for organizations primarily reliant on RVU-based revenue. We would argue, however, that these national benchmarks come primarily out of care delivery models that are overly RVU-focused and are not necessarily targets that are relevant to team- and population-based approaches moving forward.

The “right-sizing” of our physician workforce was an unanticipated outcome of the change in the compensation plans. The drop in physician FTE and increase in panel size per FTE was a likely consequence of thoughtful hiring of physicians to replace those who had left. Panel size, in addition to access-related metrics, is now used as a key driver for new hiring decisions.

The constraints desire to provide feedback. However, this was not a structural change so it should not have affected perceived satisfaction with the compensation structure. Other concurrent clinic changes may have affected retention. A care model redesign was undertaken that attempted to standardize the patient pre-visit and post-visit experience in order to better address population health needs. This redesign resulted in major changes to office workflows. During this time of significant change, however, it is even more notable that excellent physician retention occurred. Another limitation is our assessment of retention excluded physicians who left the area or retired. It is possible that these physicians left due to dissatisfaction. Per anecdotals from exit interviews, these physicians left for family reasons or pre-planned retirement.

Next, individual-level pre-post changes in satisfaction or perception of equity were not able to be measured because survey responses were anonymous. Additionally, there were differences in the pre- and post-survey response rates. If more faculty had responded to the post-survey, these responses could have swayed the magnitude or direction of response. Our pre-survey response rates were relatively high likely due to low morale and a resultant desire to provide feedback.
At follow up, response rates declined into a range more typical for surveys conducted with busy practicing clinicians. Lastly, the high rate of capitation in our system may preclude generalizability to other settings. Transitioning away from the RVU as the main measure of work would likely be difficult in an environment without significant non-fee-for-service sources of revenue.

One concern with the new compensation plan structure itself is that physicians are incentivized to have larger panels. This could be problematic if patients have difficulty accessing care due to overly full panels or if quality of care declines. Reassuringly, quality metrics related to preventive care and chronic disease management have improved rather than declined over time as our redesigned practices increasingly attend to these population health metrics. However, other quality improvement and care redesign initiatives during this same time period also supported achieving these population health targets.

Finally, panel-based compensation requires a system to weight panel members so that physicians with highly complex patients are not overburdened compared to physicians with younger, less complex health care needs. The current organizational system of weighting—which includes age, gender, and insurance status—is a step in this direction but is not sophisticated enough to account for other patient characteristics (such as social determinants) or disease states that add complexity. We are currently working on adopting a system that incorporates these factors.

More research is needed to explore how changing the balance of incentives in a compensation plan affects physician behavior with regard to how care is delivered to patients. With a drop in RVU production, are there more phone call encounters and e-visits compared to office visits? Is patient satisfaction maintained? All of these questions are important when designing a strong primary care foundation for a health system.

In conclusion, as the work of primary care evolves to more efficiently provide the comprehensive coordinated care needed by our patients, so must the way in which the work of such physicians is measured and compensated. Aligning the incentives within a physician compensation program with the goals of a larger health care organization, as well as local physician culture, is critical to create a fair environment to optimize physician satisfaction and retention. We found that addressing the lack of alignment through an open, transparent process resulted in significant improvements in physician retention and satisfaction while RVU productivity moved closer to national benchmarks and panel size per clinical FTE rose. Addressing the needs of two different groups of faculty by creating two different plans allowed each group to emphasize different aspects of work appropriate to distinct environments and values.

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