Understanding Changes to Physician Practice Arrangements in Maine and New Hampshire

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Executive Summary

Introduction

This report examines trends in the organization and ownership of physician practices in Maine and New Hampshire. The Maine Office of MaineCare Services and the New Hampshire Office of Medicaid Business and Policy observed a trend in the conversion of physicians from private practice to other practice arrangements including Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), hospital-owned practices, and hospital outpatient departments. Faced with increased costs for care provided within these facilities, both Medicaid programs sought to understand more about these changes, including their magnitude, the forces driving them, and their short and longer-term implications.

Methods

There were four components to this study:

- a review of the literature to examine national trends in physician practice arrangements;
- analysis of several data sources to examine trends in Maine and New Hampshire;
- telephone interviews with contacts in other states to examine the extent to which they have experienced similar changes; and
- telephone interviews with professional associations, practice administrators, and physicians to examine the factors influencing the adoption of various practice arrangements.

Findings

Physician and Practice Characteristics

- Nationally, the supply of primary care physicians has declined in recent years. Declines in practice income and career satisfaction are apparent across all specialties. In Maine, physicians have fewer residency options and many experienced physicians are approaching retirement age. Rural New Hampshire continues to have difficulties recruiting and retaining physicians.

- In Maine, a declining number of physicians are practicing in independent solo and group practices. Increasing numbers of Maine physicians are practicing in hospital-based and hospital affiliated practices, FQHCs, and RHCs. National trends also indicate movement toward medium and large-sized medical groups and health care facilities. No data are available from New Hampshire to examine type of physician setting.

- Nationally and in Maine, Medicaid, uninsured, and charity care patients are concentrated among facility-based providers. In Maine, fewer physicians are accepting MaineCare patients in recent years.

Throughout this report, we use facilities to refer to hospital outpatient departments, RHCs, and FQHCs.
Physician Practice Arrangements

• We found collaborative relationships between physicians and hospitals or other facilities in Maine, New Hampshire, and other states. These relationships overlap in that they either involve physicians becoming employees of hospitals or FQHCs or involve hospitals and FQHCs acquiring private practices or RHCs. We found several examples that show an evolution from private practice to facility-based care.

Factors Driving These Trends

Economic Factors

• Higher reimbursement is the greatest trigger of conversions from solo and independent practice to other types of arrangements. A few interviewees observed that enhanced reimbursement under a facility allowed struggling practices to sustain themselves.

• In Maine, private practice physicians with a large Medicaid volume report that they cannot afford to absorb low Medicaid reimbursement.

• In addition to low reimbursement from Medicaid, physicians are concerned with low reimbursement from Medicare and commercial payers. Medicare physician payment rates have remained about the same as in 2001 and the federal government has proposed a 10% reduction for 2008.

• Substantial medical school debt also affects physician practice arrangements. The average new physician has nearly $140,000 in medical school debt and is unlikely to assume the financial risk of running a small practice.

Physician Recruitment

• Hospital and other facility-based practices report that recruitment is a major factor behind decisions to buy or sell practices. Facility-based practices can offer an attractive employment package to physicians. A salary, benefits, and established office infrastructure have been important in attracting new physicians.

Administrative Burdens

• The complexities of practice administration and the need to implement costly and complex health information technology (HIT) systems have also factored into the trend towards facility-based practice arrangements.

Personal and Family Factors

• Sustaining a practice as a physician transitions to retirement was cited frequently as a reason to join an FQHC.
• Respondents noted that group practices can provide an advantage over small settings from a lifestyle and financial perspective. They offer a far less isolating approach to rural health care and interdisciplinary teams can serve a broader variety of patient needs, giving physicians less on-call time and greater collegial support.

Costs and Benefits of These Arrangements

Costs

• Respondents noted the physician productivity in employment situations, where physicians receive a salary, may decline. Independent practices typically pay physicians based on cash receipts or revenue, directly reflecting patients seen throughout a physician’s work day.

• Large group and employment arrangements may impose requirements that impact physicians’ clinical work, such as length of appointment times and number of appointments in a day.

• The installation of electronic medical record (EMR) packages may compel physicians to practice in new and regimented ways, affecting their job satisfaction. Additionally, installation of EMR is a large infrastructure investment and is not likely to lead to immediate cost savings.

Benefits

• Large health facilities have enough physicians generating income that they achieve economies of scale to support their billing, administration, and staff. Large settings also provide financial security that can lead to other important goals, such as active participation in quality assurance initiatives and implementing HIT systems.

• For providers such as FQHCs, the trend toward larger settings has contributed to expanded types of services. Some respondents noted that these services may include dental, mental health, pharmacy programs, chronic disease management, and case management and in some cases has resulted in integrated, interdisciplinary patient care in multi-specialty group practices. In some cases, facilities have been able to re-capture MaineCare participation by previously hard-to-find providers, such as dentists and urologists.

• With Maine solo practitioners less able to provide care and often limiting the number of Medicaid patients they see, Medicaid beneficiaries are becoming more concentrated among fewer, large provider groups.

Policy Implications

• There are few policy options available to Maine and New Hampshire to influence physician preferences in the practice of medicine. Increased reimbursement is unlikely to draw physicians away from facility-based practice, though it would support the physicians that
remain in office settings and introduce equity in payment for services that differ only in location or arrangement.

- Since 2002 the Federal Health Center Growth Initiative has added new Community Health Centers/FQHCs and/or added new sites or expanded services at existing Centers. States’ authority to influence these changes is limited to the designation of health professional shortage areas. Absent authority to plan or designate the development and location of these facilities, it is important that Maine and New Hampshire make their Medicaid access needs and priorities known to FQHCs, RHCs, and their associations to ensure consideration in the future development of new facilities and sites.

- Although Maine and New Hampshire cannot reverse the tide of changes in practice arrangements, they can work with practices to develop policy and other initiatives to promote access to high quality, efficient care for Medicaid beneficiaries. A starting point for this would be to examine the performance of practices throughout the state on key access, quality, and cost measures to determine whether these new arrangements do provide enhanced value for the Medicaid program.

- Access to services for Medicaid beneficiaries is tied to recruitment and retention of physicians. Our work suggests that the trend toward physician employment is driven in part by an effort to enhance physician recruitment and retention. This is thought to ensure access to primary and specialty care for Medicaid beneficiaries, particularly as solo practitioners move away from providing this care. It is important for Maine and New Hampshire to monitor physician recruitment and retention, particularly as they affect access to services for Medicaid beneficiaries.

- Maine and New Hampshire should consider whether these new practice arrangements are organized to deliver higher quality care through HIT or other practice-based initiatives in comparison to independent providers.

- Currently, states pay higher reimbursement rates for FQHCs and RHCs though they have limited authority over those designations. This study demonstrates that FQHC and RHC sites and services are increasing in prominence in Maine and New Hampshire. Maine and New Hampshire should consider their roles in supporting the care delivered in these sites and assure that the increased payments for services delivered in these sites result from the ability of those centers to deliver comprehensive, high quality services. In addition, Maine and New Hampshire should continue discussions with the Centers for Medicare & Medicaid Services, the Health Resources and Services Administration and other federal and state agencies charged with administering these programs to have input into their location, administration, and reimbursement. At the local level, state policymakers should seek a partnership with the Maine Primary Care Association or the New Hampshire Bi-State Primary Care Association to participate in the creation of new or expanded community health center sites.
Introduction

This report examines trends in the organization and ownership of physician practices in Maine and New Hampshire. The Maine Office of MaineCare Services and the New Hampshire Office of Medicaid Business and Policy have observed a trend in the conversion of physicians from private practice to other practice arrangements including Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), hospital-owned practices, and hospital outpatient departments. Physician payment is significantly higher for care provided through health center and hospital arrangements than under the fee schedule for care provided within an independent private practice, resulting in higher Medicaid costs. Faced with increased costs, both Medicaid programs sought to understand more about these changes, including their magnitude, the forces driving them, and their short and longer-term implications.

This study examines these trends nationally and in Maine and New Hampshire using four main strategies:

- a review of the literature to examine national trends in physician practice arrangements;
- analysis of several data sources to examine trends in physician practice arrangements for Maine and New Hampshire;
- telephone interviews with contacts in other states (e.g., state offices of rural health, state Medicaid agencies, and health policy researchers) to examine the extent to which they have experienced similar changes and the strategies they have employed to deal with these changes; and
- telephone interviews with professional associations, practice administrators, and physicians to examine the factors influencing the adoption of various practice arrangements.

Not all of these strategies were successful. For example, existing data sources were not created for the purpose of identifying physician practice arrangements and do not allow us to clearly identify various types of practices (see Appendices 1 and 2 for a detailed discussion of data limitations). Nevertheless, the combination of information sources provides ample documentation describing the trend away from independent physician practice arrangements and the factors influencing this trend. In the final section of this paper we also consider the policy implications and questions that emerge from this study.

Background

The impact of emerging trends in physician practice arrangements on Medicaid program costs was a significant motivation for this project. Below we document changes in Medicaid costs and associated service use. We also describe the FQHC and RHC programs and the appeal these designations may hold for providers.
Where Are Medicaid Costs Increasing?

Analysis of Medicaid claims from Maine and New Hampshire confirm the observation that ambulatory services are moving from physician offices to other sites including hospital outpatient departments, RHCs, and FQHCs for Medicaid beneficiaries. MaineCare’s member population has doubled in the past 6 years and the program has experienced significant increases in its FQHC and hospital outpatient costs. Cost and service use also increased in New Hampshire, though less dramatically than in Maine. New Hampshire’s cost and service use has increased in similar amounts across hospital outpatient departments, physician offices, and a combined category of RHCs and FQHCs. New Hampshire’s cost increases were not consistently associated with a trend toward more care being delivered in facility settings. While use of services in facility settings and associated costs increased in these two states, the data do not describe the impact on access or quality of care that these changes might bring to Medicaid beneficiaries.

MaineCare Costs and Service Use

Using Medicaid claims and provider files to examine MaineCare costs, we found significant cost and service use increases for care delivered in outpatient, RHC, and FQHC settings with smaller cost increases for physician offices. Between 2000 and 2006, MaineCare membership almost doubled from 169,921 to 313,523 (Appendix 3). During this time, all hospital outpatient costs increased from $35.7 million to $173.1 million (Table 1). It is unknown to what extent increasing outpatient costs resulted from reimbursement rates of facility-based care or increases in the type or amount of services delivered in outpatient settings (e.g., an increase in diagnostic tests or ambulatory surgery). Though we could not clearly disentangle primary care outpatient visits from other services, we did find that payments for FQHCs increased from $5.8 million in 2000 to $55.2 million in 2006, while RHCs increased from $4.1 million to $20.6 million. These increases across provider setting were accompanied by substantial increases in the number of patients served and costs per patient. By contrast, physicians experienced the smallest increases of any setting. The cost paid per patient served in a physician office increased from $34.8 million to $69.7 million, while costs per patient increased by $34. Physician costs are kept down by the Medicaid fee schedule which has changed once since 2000; on the other hand, hospitals, RHCs, and FQHCs receive annual increases through cost-based reimbursement.

<table>
<thead>
<tr>
<th></th>
<th>Hospital Outpatient</th>
<th>Physician Offices</th>
<th>RHCs</th>
<th>FQHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Costs</strong></td>
<td>$35.7 M</td>
<td>$173.1 M</td>
<td>$34.8 M</td>
<td>$69.7 M</td>
</tr>
<tr>
<td></td>
<td>$399</td>
<td>$995</td>
<td>$327</td>
<td>$361</td>
</tr>
<tr>
<td><strong>Costs per Patient</strong></td>
<td></td>
<td></td>
<td>$238</td>
<td>$460</td>
</tr>
<tr>
<td></td>
<td>89,658</td>
<td>174,075</td>
<td>106,221</td>
<td>193,235</td>
</tr>
<tr>
<td><strong>Patients Served</strong></td>
<td></td>
<td></td>
<td>17,180</td>
<td>44,752</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15,092</td>
<td>75,060</td>
</tr>
</tbody>
</table>

Source: MaineCare MMDSS claims extracts for claims incurred and paid by 9/23/2007; hospital outpatient claim adjustments applied.

* Outpatient data include all outpatient services, not just physician services.
The percent of MaineCare beneficiaries using outpatient and clinics services increased, while physician services show a slight decline (Figure 1). Primary care physician services (i.e., family practice, pediatrics, internal medicine and obstetrics and gynecology) actually increased from 33.2% to 39.3%. Turning to average amount paid per claim, MaineCare outpatient payments per claim increased two-fold, from $94.15 to $191.11. Clinic payments increased from $48.55 to $88.94. Physician payments declined from $58.78 to $54.75, with a more pronounced decline among primary care doctors – from $72.92 to $47.28. This decline could be a result of more lower-priced services being performed. Both RHC and FQHC per claim payment increased.

Figure 1: Percent of Medicaid Members Using Selected Services SFY 2000 and 2006
MaineCare – Maine Based Providers Only

- Outpatient Total: 52.8% (2000), 62.5% (2006)
- Physician Total: 61.6% (2000), 61.6% (2006)
- Primary care: 33.2% (2000), 39.3% (2006)
- FQHC: 8.9% (2000), 8.9% (2006)

° The average payment per claim is used as an estimate of the costs of an encounter or visit in each setting.
New Hampshire Costs and Service Use

Using New Hampshire Medicaid claims data, we found that New Hampshire has experienced a more modest rate of increase in costs and service use (Table 2). Between 2000 and 2006, New Hampshire Medicaid enrollment increased 27% from 108,197 to 137,704 (Appendix 4). In the early 2000s, New Hampshire Medicaid had a portion of their membership enrolled in a health maintenance organization (HMO). The HMO was paid a monthly capitated rate to cover health services. Costs and use of individual services could not be identified, thus understating the total costs and use of these services. New Hampshire no longer uses the HMO. The earliest data without HMO costs was for 2004, limiting our ability to examine changes in cost and use by setting. Between 2004 and 2006, enrollment increased only slightly, by 3.4%. Costs of services and service use also increased; however, these increases were modest.

<table>
<thead>
<tr>
<th>Table 2: New Hampshire Medicaid Increases by Provider Setting, 2004 – 2006*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital Outpatient</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
</tr>
<tr>
<td>Costs per Patient</td>
</tr>
<tr>
<td>Patients Served</td>
</tr>
</tbody>
</table>

*Costs and services were limited to New Hampshire-based providers only.
**Costs are combined in the New Hampshire Medicaid claims system for clinics.

Source: New Hampshire Medicaid Claims Data

A greater proportion of New Hampshire Medicaid members received services in 2006 over 2004 (Figure 2). Members using outpatient services increased from 47.1% to 54.3%. Members using physician services increased from 65.9% to 69.8%, while the percent of members using clinics increased by 1.4%.

New Hampshire Medicaid paid roughly $11 less per claim for outpatient services in 2006 ($146.87) than in 2000 ($160.84).* Notably, in 2004, the cost per claim for outpatient services was $184.08 – much higher than observed in either 2000 or 2006 (Appendix 4). Due to budgetary shortfalls in 2005, the Medicaid Program reduced payments for outpatient services from 91.3% to 81.2% of costs for non-critical access hospitals. Both physicians and clinics received higher per claim payments in 2006. Physician claims increased from $39.87 in 2000 to $48.07 in 2004, to $53.62 in 2006. Combined RHC and FQHC claims increased from $80.58 to $104.33.

* While the total cost and number of users in 2000 is understated, the average costs per claim can still be compared for change over time.
Explaining the FQHC and RHC Programs

Federally Qualified Health Center (FQHC) Program

The federal government created the FQHC program in 1989 to ensure access to care for the uninsured and those covered by public programs in medically underserved areas. Under Medicare, FQHCs receive cost-based reimbursement. Under Medicaid, FQHCs receive prospective payment. Typically, \(^\diamond\) FQHCs also receive grant funding to care for the uninsured.\(^1\) These centers provide primary care and other services to all ages (i.e., pediatric practices may not be an FQHC) and must offer a sliding fee scale based on patient family size and income. FQHCs include community health centers (CHCs), migrant health centers, health care for the homeless programs, and public housing primary care programs. Additionally, FQHCs are eligible to purchase prescription and non-prescription medications for outpatients at reduced cost through the 340B Drug Pricing Program. They also have access to medical malpractice coverage through the Federal Tort Claims

\(^\diamond\) Some FQHCs operate in compliance with FQHC program requirements but do not receive grant funding. These FQHCs are called “Look-Alikes.”
Act, access to providers in the National Health Service Corps, and access to the Vaccine for Children program.\textsuperscript{2,3}

The Bush Administration launched the Federal Health Center Growth Initiative in 2002 to add new points of service or expand medical capacity at existing CHCs. The goal of the Initiative is to increase the number of patients treated annually at CHCs from ten million in 2001 to 16 million in 2006.\textsuperscript{4} The President’s FY 2007 Budget proposed to continue investing in this Initiative targeting medically underserved and low-income populations.\textsuperscript{5} Nationally, CHCs are responding, expanding their services and adding new clinical sites.\textsuperscript{5} At least in Maine the Initiative appears to be impacting the number of FQHCs. In 2007, 18 FQHCs served an estimated 205,000 Maine residents, compared to 12 FQHCs in 2002.\textsuperscript{7} In New Hampshire, 9 FQHCs served over 56,000 residents in 2005, compared to 8 FQHCs serving over 42,000 in 2000.\textsuperscript{8} Each FQHC may have one or more site of service.

\textit{Rural Health Clinic (RHC) Program}

The RHC designation allows primary care practices located in rural areas with provider shortages to receive prospective payment under Medicaid and cost-based reimbursement under Medicare. In addition to physicians, RHC status also allows for care to be delivered by nurse practitioners, physician assistants, certified nurse midwives, clinical psychologists, and clinical social workers. RHCs generally serve small towns and isolated rural areas characterized by poverty, reliance on public assistance, and a depressed economy. Uninsured and low-income patients compose a significant portion of the RHC patient base, though clinics receive no specific reimbursement for their care.\textsuperscript{9} Most RHCs are smaller and offer fewer services than FQHCs, although some RHCs are affiliated with hospitals. As of 2005, Maine had 35 RHCs and 39 sites of care.\textsuperscript{10} As of 2006, New Hampshire had 11 RHCs and 17 sites of care.\textsuperscript{11}

\textbf{Methods}

\textbf{Review of the National Literature}

To examine national trends in physician practice arrangements, we reviewed the national literature using several search procedures. We began with keyword searches through the National Library of Medicine’s PubMed system and the University of Southern Maine’s online library. We specifically searched the literature on physician characteristics, as well as trends in physician specialty, income, and practice setting; facility characteristics, including trends in care delivered in hospital outpatient departments, FQHCs, RHCs, and physician offices; reimbursement issues; and state responses to changes in physician practice. Additional citations were obtained through bibliographies of found articles. We searched the websites of multiple organizations engaged in work related to our topic including the Henry J. Kaiser Family Foundation, the Center for Studying Health System Change, the National Center for Health Statistics, the Urban Institute, Mathematica Policy Research, Inc., and the National Conference of State Legislatures. We also searched newspapers through the ProQuest search engine from the mid-1990s to the present.
Data Analysis

Data Sources

Previous analysis conducted on Maine claims data found these data to be limited and problematic in assessing these trends. Therefore, this project included an assessment of additional data for their usefulness to examine the trend in physician practice changes. We identified and assessed the following data:

- Maine Physician Resource Inventory (Licensing Survey)
- Maine and New Hampshire Uniform Outpatient Dataset
- Quality Evaluation and Information Management System (QIES)
- MaineCare and New Hampshire Medicaid Claims Data
- Maine and New Hampshire All-Payer Data
- Maine Health Data Organization (MHDO) Uniform System for Reporting Baseline Information and Restructuring Occurrences, 90-590 Chapter 630
- MOOSE – MaineCare’s Primary Care Case Management (PCCM) provider enrollment and tracking system
- Community Tracking Study
- American Hospital Association Annual Survey

We also present data collected and analyzed by the Maine Hospital Association and the Sheps Center at the University of North Carolina.

Data Limitations

Each data source we examined had limitations for this analysis and no one source allowed us to examine the trend in physician practice changes in either state. While there are many sources of information, these sources represent fragmented parts of the physician profile (e.g. Medicaid only), are newly collected and can not identify trends, or their results are ambiguous. The all-payer data systems in each state offer hope to examine data in the future; however, issues in claim completeness, identification of physicians and services related to primary care billed under hospitals remain challenges. We present findings from our analysis throughout this report and summarize the limitations for each data source in Appendices 1 and 2. Due to limitations, we did not include analyses of the all-payer data, the MHDO 90-590 Outpatient Data, or the Community Tracking Survey.

Telephone Interviews of Key Informants

To identify changes in physician practice arrangements in other states, we initially interviewed previously established contacts to identify states for further interviews. We also sent an inquiry email to all state offices of rural health. We then conducted telephone interviews with one or more representatives from the following states: Colorado, Massachusetts, Mississippi, North Carolina, Oregon, Pennsylvania, and Washington.
We conducted 20 telephone interviews with practice administrators and physicians to ask whether and why the practice had made a change in its structure and how the change impacted the practice. We also interviewed professional associations to understand their perspective on physician practice arrangements. We do not present names of our telephone interviewees to preserve respondent confidentiality.

Findings

Trends in Physician Characteristics

Nationally, the supply of primary care physicians has declined somewhat in recent years. Applications to medical schools have declined by nearly 20% over the past decade.\textsuperscript{13} Between 1995 and 2003, primary care physicians declined by three percent among all physicians while medical specialists increased by four percent.\textsuperscript{14}

Declines in practice income and career satisfaction are apparent across all specialties. Average physician net income declined by 7 percent among all physicians and primary care physicians experienced the largest decrease (10.2 percent).\textsuperscript{14} Billing paperwork, reimbursement levels, and the high cost of practice are each considered problems in the practice of medicine. Dissatisfaction with the practice of medicine has led many physicians to attempt to reduce practice costs and/or increase revenue, including reduced staffing levels or hours and expanding the number of patients or range of services.\textsuperscript{15} Rural physicians have sold their practices motivated by difficulties in recruiting other physicians, managed care concerns, and administrative burdens. Policy analysts expect these concerns to continue and predict a persistent shift in the ownership of rural physician practices.\textsuperscript{16}

Physician recruitment has also presented challenges in both states. The Maine Department of Labor and Statistics recently reported limited residency opportunities in Maine and approaching retirement age for one out of every five Maine physicians. Physician recruitment for Maine rural areas is difficult due to low potential earnings, longer hours, and isolation from medical specialists.\textsuperscript{17} According to rural advocates, New Hampshire has experienced similar recruitment difficulties, particularly among its rural north. Compared to hospitals, New Hampshire’s CHCs have limited ability to offer competitive compensation to draw new physicians and frequently rely on J-1 visa waiver and \textit{locum tenens} physicians to fill shortages. The following sections review the trends and changes in physician practice arrangements in Maine and New Hampshire.

Trends in Practice Arrangements

\textit{Size of Practice}

In Maine, a declining number of physicians are practicing in independent solo and group practices (i.e., not owned by a hospital or its parent organization). Increasing numbers of Maine
physicians are practicing in hospital-owned practices, FQHCs, and RHCs. Maine data indicate a 20% and 7% decline in physicians practicing in solo and group practices between 2000 and 2004 respectively, while facility-based employment increased by nearly 12% (Table 3 and Appendix 5). A long-time observer of hospital-physician relationships in Maine identified independent physician practices as a dying breed, with many physicians moving from traditional solo practice into an employment model.

<table>
<thead>
<tr>
<th>Practice Arrangements</th>
<th>2000 (N=2559)</th>
<th>2004 (N=2707)</th>
<th>Percent Change in Number of Providers</th>
<th>Absolute Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Solo Practice</td>
<td>24.6% (629)</td>
<td>19.7% (638)</td>
<td>1.4%</td>
<td>-20.0%</td>
</tr>
<tr>
<td>Independent Group Practice</td>
<td>47.3% (1,211)</td>
<td>43.9% (1,424)</td>
<td>17.6%</td>
<td>-7.2%</td>
</tr>
<tr>
<td>Facility</td>
<td>21.9% (560)</td>
<td>24.4% (114)</td>
<td>41.4%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Government</td>
<td>2.6% (67)</td>
<td>3.5% (114)</td>
<td>70.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Other</td>
<td>3.0% (77)</td>
<td>3.9% (125)</td>
<td>62.3%</td>
<td>28.1%</td>
</tr>
</tbody>
</table>

Source: Maine Physician Resource Inventory Data.

National data confirm a decline in solo and small group practice and a growth in institutional and large group practice. Physicians in solo and two-person practices declined from 41% to 33% between 1996-97 and 2004-05, while those in all other types of practice arrangements increased from 59 percent to 68 percent. During this time, the proportion of physicians with an ownership stake in their practice declined from 62% to 54%, a trend more pronounced among specialists and physicians over age 50. Physicians have moved toward larger practices, with significant increases in groups of 6-50 physicians, and toward single-specialty group practices.

Concentration of Medicaid Beneficiaries

The literature dates to the early-1990s in observing that office-based physicians do not practice in locations with the greatest concentration of Medicaid beneficiaries. For example, the Kaiser Commission reported in 1992 that Medicaid beneficiaries were twice as likely as the privately insured to receive care in hospital settings. More recent analysis finds that Medicaid patients have become increasingly concentrated among a smaller proportion of physicians practicing in large groups, hospitals, academic medical centers, and community health centers. Among physicians in small or solo practices, 29 percent did not accept new Medicaid patients in 1996-97 compared to 35 percent in 2004-05. In 2004, Medicaid beneficiaries used hospital settings more frequently than physician offices for ambulatory care (Table 4). Medicaid beneficiaries are expected to continue moving toward providers dependent on Medicaid revenue or who have a mission to serve Medicaid patients.
Table 4: National Comparison of Hospital Outpatient and Physician Office Visits 2004

<table>
<thead>
<tr>
<th>Insurance Coverage</th>
<th>Percent Distribution of Hospital Outpatient Department Visits</th>
<th>Percent Distribution of Physician Office Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private insurance</td>
<td>36.5%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Medicaid or SCHIP</td>
<td>30.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Medicare</td>
<td>15.5</td>
<td>22.7</td>
</tr>
<tr>
<td>Self-pay</td>
<td>6.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Uninsured</td>
<td>Not given</td>
<td>4.8</td>
</tr>
</tbody>
</table>


In Maine, fewer private physicians are treating MaineCare patients in recent years. Analysis of the Maine Physician Resource Inventory showed a 7% decrease among physicians accepting new MaineCare patients and a 5% decrease among physicians treating MaineCare patients between 2000 and 2004 (Table 5). However, even with these declines, the average percent of a practice covered by MaineCare increased from 19.4% to 25.5%, suggesting that MaineCare patients are concentrated among fewer physicians. Unfortunately, New Hampshire does not collect similar data on its physicians. Despite the fact that it is an unpopular choice among Maine physicians to close to Medicaid patients, many physicians still limit their Medicaid panels.

Table 5: Maine Physicians Treating MaineCare Patients 2000-2004

<table>
<thead>
<tr>
<th>Types of Physician Acceptance</th>
<th>2000</th>
<th>2004</th>
<th>Percent Change in Number of Providers</th>
<th>Absolute Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepts New MaineCare</td>
<td>77.2% (1,975)</td>
<td>71.8% (2,330)</td>
<td>18.0%</td>
<td>-6.9%</td>
</tr>
<tr>
<td>Treats MaineCare</td>
<td>92.4% (2,365)</td>
<td>87.8% (2,847)</td>
<td>20.4%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Limits MaineCare</td>
<td>14.5% (371)</td>
<td>11.4% (371)</td>
<td>0.0%</td>
<td>-21.1%</td>
</tr>
<tr>
<td>Average MaineCare Percent of Practice</td>
<td>19.4%</td>
<td>25.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Maine Physician Resource Inventory Data.

Physician Practice Arrangements in Maine, New Hampshire, and Other States

Our telephone interviews in Maine, New Hampshire and other states revealed collaborative relationships between physicians and hospitals or other facilities. These relationships overlap in that they either involve physicians becoming employees of hospitals or FQHCs or involve hospitals and FQHCs acquiring private practices or RHCs. Many of the examples presented below show an evolution from private practice to facility-based care.
Hospital Employment of Physicians

According to the Maine Hospital Association, 33% of Maine physicians were employed by hospitals in 2003, increasing to 42% by 2006. In 2006, a significant portion of the 1,905 physicians employed by Maine hospitals were primary care specialists, including 338 (18%) family practice physicians, 199 (10%) internal medicine physicians, and 129 (7%) pediatricians. (Data by specialty are not available for 2003.) Analysis of the Maine Physician Resource Inventory showed that physicians working in the hospital setting increased from 30.8% to 32.8% between 2000 and 2004. No similar data sources were available for New Hampshire. A respondent from a Maine professional association is concerned that the trend toward hospital employment and conversion to FQHC status is so strong that physicians have little choice in where they practice. He predicts these trends while continue into the future.

- **A group practice in New Hampshire** composed of five providers had difficulty financing and recruiting staff and making needed infrastructure improvements. After closing to Medicaid patients and failing to negotiate better contracts with commercial insurers, the practice entered negotiations with a local hospital and was officially purchased in 2007.

- To secure subspeciality services, a **large physician group in Maine** began to acquire a small number of subspecialty practices that were having a hard time self-sustaining about 20 years ago. Beginning in the mid-1990s, other physicians became interested in joining the physician group, partially as a result of low reimbursement rates and increasing practice costs, but primarily driven by concern regarding physician recruitment.

- **North Carolina** has observed increased affiliation between hospitals and physician practices and/or safety-net clinics, with hospitals seeking a share of the outpatient market. Hospital acquisition of primary care practices has come in waves, alternating between hospitals divesting when they lose financially and back towards purchasing. The long term trend has been toward affiliated systems.

- In its **urban areas, Pennsylvania** has experienced growth in hospital employment of physicians, particularly hospitalists and obstetricians. Hospitals have employed physicians because short lengths of stay require immediate patient visits and physicians and residents require shorter hours. There was a short period where hospitals bought physician practices, but they often found it difficult to keep physicians motivated and typically lost money on these ventures.

**Physician Practices Converting to FQHC Status**

We found several examples of physician practices converting to FQHC status in New Hampshire and Maine and this was also apparent in Pennsylvania and Washington.

- **An FQHC in New Hampshire** originated from the sale of a primary care practice to a hospital during the mid-1990s. After the sale, the practice lost money and the hospital
sought to convert the practice to an RHC or an FQHC as a way to stabilize it. After hiring its current practice manager, the practice asked to be divested of the hospital in 2003 and sought FQHC look-alike status. They were granted that designation and bought a local psychology practice in 2005.

- **An FQHC in Maine** absorbed four primary care practices in the past five years. Payer-mix and reimbursement requirements meant that many long-established practices were struggling to stay in business. These practices approached the health center and have since become employed by it.

- **An FQHC in Maine** absorbed several physician practices in recent years, all at the physicians’ request. These practices faced likely financial failure and specifically could no longer afford to see MaineCare patients and the uninsured. They joined the FQHC to continue their practice; otherwise, these physicians might have closed to MaineCare patients.

- **An FQHC in Maine** started as a primary care practice in the 1980s and recently received the FQHC designation. In response to approaching physician retirement, the health center previously acquired a specialty physician practice and is currently acquiring two additional specialty practices. Each acquisition was prompted by the physician.

- Among critical access hospitals in **rural Pennsylvania**, a few moved from employing primary care physicians to setting up FQHCs and RHCs for them, as a way to keep these physicians in the community but not through hospital employment. The hospitals struggled with the expense of malpractice insurance and the financial risk of running a physician practice.

- **In Washington state**, most primary care practices that were once private are now owned by an FQHC, hospital, or network.

**FQHCs Converting from RHCs**

We found several examples of RHCs converting to FQHC status in New Hampshire, often as a result of hospital divesture. These hospitals found running RHCs to be time-consuming and costly, with better reimbursement available under the FQHC designation. We did not find examples of conversion from RHCs in Maine.

- Beginning in the mid-1990s, **an FQHC in New Hampshire** and a hospital-based RHC had multiple discussions on service integration. Finally in the early 2000s, the poor financial state of the RHC drove the hospital to revisit the FQHC model, with the FQHC and the hospital eventually participating in joint steering, clinical, human resources, and finance committees. Recently, the FQHC and RHC merged, increasing the health center size from 4,000 patients to 13,000 patients.

- **An FQHC in New Hampshire** converted from a RHC to FQHC designation to obtain grant funds to serve the uninsured, underinsured and Medicaid beneficiaries.
Another FQHC in New Hampshire was granted FQHC status in the 1990s, adding a RHC to its center during that time and a hospital-based RHC more recently. The hospital had consistently lost money operating primary care services and wanted to divest the RHC.

Conversion of Private Practices to RHCs

In only a few telephone interviews did we hear of private practices converting to RHC status. From the literature, we know that RHC conversion surged throughout the 1990s. Nationally, RHCs increased significantly during the 1990s, growing from 581 clinics in 1990 to 3,477 in 1999. Among RHCs that converted from another type of provider organization, 72 percent converted from a private physician practice. In a review of newspaper articles published between 1990s-2006, we found several examples of hospitals opening RHCs as a way to strengthen their finances.

Rural health advocates in New Hampshire have recently witnessed an increase in interest from hospitals and physicians in converting to RHC status. Stroudwater Associates, a consulting firm, will present a workshop in November about conversion to New Hampshire providers.

Rural health advocates in Oregon have observed a spike in the conversion of private practices to RHCs in the past four years, following state revisions to the federal HPSA designations and increased reimbursement available to RHCs and FQHCs. The state Medicaid agency currently supports conversion of practices to RHCs despite budget constraints in order to ensure the availability of Medicaid providers in the rural areas. An unintended consequence of expanded HPSA designations was the increased eligibility of many clinics for RHC status that may not have had a compelling need.

What Factors Are Driving These Trends?

Economic factors, physician recruitment, administrative burdens, and personal and family factors are driving physician movement from small, solo practice towards large group practice and clinic and hospital employment.

Economic Factors

There are several economic factors influencing physician practice arrangement trends, including the combined impact of low Medicaid reimbursement and high Medicaid coverage rates, tightening reimbursement from Medicare and commercial payers, and physicians’ personal concerns for managing their medical school debt.
• **Low Medicaid Reimbursement**

A representative of a Maine professional association said that higher reimbursement is the greatest trigger of conversions from solo practice to other types of arrangements. The Urban Institute concurs, noting that the motivation for Maine physicians becoming employees of hospitals or FQHCs is related to the higher reimbursement received by these facilities under Medicare and Medicaid. The same service provided by a hospital-based physician compared to an independent physician is paid 20 to 30 percent more by Medicaid.

Private practice physicians with a large Medicaid volume reported that they cannot afford to absorb low Medicaid reimbursement. This is especially problematic when costs cannot be shifted to commercially insured patients. A rural health advocate in Maine noted that many private practice physicians are in a quandary between MaineCare’s low reimbursement rate and the fact that MaineCare covers such a high proportion of their patients. In some rim counties (Oxford, Somerset, Piscataquis, Aroostook, and Washington Counties), where MaineCare covers more than 30% of the population, physicians must see these patients; however, their proportion of private pay patients is not large enough to offset low MaineCare reimbursement. A representative of a professional association pointed out that widespread coverage under MaineCare significantly impacts primary care physicians, especially pediatricians. Many pediatricians have joined a large physician group practice in southern Maine in recent years to address the large portion of their panels on MaineCare (in some cases, 40% or more of patients were enrolled with MaineCare).

A few interviewees observed that reimbursement under an FQHC allowed struggling practices to sustain themselves, albeit in a different form. In Maine, well-established solo practitioners struggled to stay in business. These practices saw that they might need to close or align themselves with larger organizations and approached an FQHC. The FQHC offered these physicians a salary and a contract and paid them for equipment and their charts. Another FQHC in Maine absorbed several physician practices in recent years, all at the physicians’ request. These practices faced likely financial failure and specifically could no longer afford to see MaineCare patients and the uninsured. They joined the FQHC to continue their practice; otherwise, these physicians might have closed to MaineCare patients. These practices would not have succeeded without the FQHC’s enhanced reimbursement. Another FQHC in New Hampshire said that the federal grant funds were a much greater influence in deciding to convert to FQHC status than enhanced Medicaid and Medicare reimbursement, likely a result of a large uninsured population.

• **Reimbursement from Other Payers**

In addition to low reimbursement from Medicaid programs, physicians are concerned with low reimbursement from Medicare and commercial payers. Medicare physician payment rates have remained about the same as they were in 2001 and the federal government has proposed a 10% reduction for 2008 with another 40 percent reduction forecast between 2008 and 2016. According to the American Medical Association, Maine will lose $70 million in 2008 and 2009, and $1 billion by 2016. New Hampshire will lose $50 million in 2008 and 2009, and $860 million by 2016. Medicare and Medicaid combined account for more than 50% of
reimbursement for many physicians. In private practice, these costs are either shifted to other payers or taken out of the physicians’ paycheck. In addition, commercial payers are also tightening reimbursement, so that providers may no longer stretch payments from commercial payers to cover losses from public payers. These limitations on payer reimbursement are not keeping pace with many private practices’ expenses.

- Medical School Debt

Substantial medical school debt also affects physician practice arrangements. A physician employed by a Maine hospital speculates that the average new physician with $130,600 in educational debt is unlikely to assume the financial risk of running a small practice. These physicians do not want to develop the infrastructure necessary to comply with state and federal regulations or with such basic administrative requirements as human resources management. If it turns out that the community does not suit the physician, it is easier to move if the physician is a hospital employee and not locked into leases for equipment and office space. Additionally, hospitals and CHCs had been able to offer federally-funded loan repayment programs to physicians in return for service in an under-served area, functioning as a recruitment strategy. However, neither state was refunded under this program as of September 1, 2007. Maine providers are no longer offering student loan repayment as a result. Though the absence of federal participation reduced its funding level, New Hampshire’s legislature included loan repayment funds in its state budget allowing the program to continue.

Since private practice physicians are paid on accounts receivable, this creates uncertainty around whether and how much they will be paid. This insecurity makes it difficult to negotiate with banks to buy a home or to develop an agreement for student loan repayment. The practice manager of a large multi-specialty group practice in Maine observed that young physicians have a number of practice alternatives to chose from. When these physicians evaluate offers, Maine practices must offer a substantial salary to compete with other states. Often, this results in practices paying new physicians the same salary as physicians with 20 to 30 years experience.

Data from the North Carolina Health Professions Data System show an increase between 1998 and 2005 among new physicians choosing a hospital setting over groups, clinics, and solo practice (Figure 3).

Figure 3: New North Carolina Physicians Practicing by Location 1998 - 2004

North Carolina Health Professions Data System, 2005. Includes all physicians who became licensed in North Carolina or who reactivated their license; excludes residents.
Although data are limited for Maine and New Hampshire, the Maine Physician Resource Inventory from 2000 and 2004 shows a similar trend for new physicians, with decreasing solo practitioners and group owners, and increasing employment in groups and facilities (Figure 4).

![Figure 4: Maine Physicians Practicing Less than 3 Years by Location, 2000 and 2004](image)

**Physician Recruitment**

Hospital and other facility-based practices report that recruitment is a major factor behind decisions to sell or buy practices. Private practice physicians have found it difficult to recruit new physicians into their practice and see the sale of their practice to a hospital as the only way to bring new physicians on board. One orthopedic physician tried to recruit an associate for years in order to retire, eventually selling to a hospital. Many physicians interviewed for this study are finding there is limited financial value in a medical practice; other physicians are not going to buy into a practice when there are hospital vacancies.

A large multi-specialty group practice began buying physician sub-specialty practices about 20 years ago to preserve access to these physicians in Maine. During the mid-1990s, other primary and specialty care physicians became interested in joining the group, primarily as a result of the need to recruit new physicians to practices. Additionally, in the 1990s, there was increasing interest among payers in having primary care physicians direct patient care and referrals; independent physicians wanted to increase the size of their practice to accommodate this, but
they did not have the financial resources to increase their practice size. They chose to join the group in order to attract new physicians.

Though still independent, a single specialty group in Maine did discuss selling their practice to a hospital because of difficulties they faced in recruiting new physicians and covering overhead costs. The practice thought a larger organization might be more attractive to recruiting new physicians. The practice decided against selling at this time because they appreciate autonomy and want to control their schedules.

**Administrative Burdens**

Administrative burdens have influenced the trend toward practices becoming part of a hospital or an FQHC, including higher reimbursement through these arrangements and increasing practice administration complexities and costs.

- **Practice Administration**

  The complexities of practice administration and the need to implement costly and complex health information technology (HIT) systems have also factored into the trend towards facility-based practice arrangements. Multiple physicians and practice managers described the administrative hassles of running a private practice, even those physicians strongly opposed to employment models of practice. Federal regulations (such as workplace safety and patient privacy requirements), insurers’ requirements for prior authorization, and Medicaid quality improvement initiatives all contribute to this burden, according to one interviewee. There are more than 20 different ways to pay a claim, a far too complicated system for small offices. The practice manager of an FQHC in New Hampshire noted that solo practices can not afford the necessary expertise in human resources, billing, coding, and practice management; however, these resources are affordable when spread over several physicians. Additionally, the representative of a New Hampshire professional association noted that the costs of employee health benefits and malpractice coverage are increasing while reimbursement is declining.

  The perception of financial, clinical and administrative burden differs by practice type and may explain some movement toward facility-based practice. Nationally, inadequate and delayed reimbursement and paperwork requirements appear to function as more significant deterrents to accepting Medicaid patients among office-based physicians compared to facility-based physicians. In contrast, the perceived burden of Medicaid patients was generally lower among hospital-based physicians.

**Personal and Family Factors**

Retirement, family commitments, and quality of physicians’ personal lives are also influencing practice decisions. Our telephone interviews revealed that physicians want more time away from the demands of medical practice and personal life considerations factor into career moves. Newer physicians in particular appear to have expectations different from their predecessors.
• **Physician Retirement**

Sustaining a practice as a physician transitions to retirement was cited frequently as a reason in joining an FQHC. For example, a physician planning to retire in a few years joined an FQHC in Maine, to safeguard his practice against closure in the absence of someone to take over the practice. Another Maine FQHC is currently acquiring two specialty physician practices and had previously a third in response to approaching physician retirement. These acquisitions have been in response to inquiries from the private physicians, who are the sole or one of few specialists in their community. In one case, the FQHC worked with the physician to transition into retirement while simultaneously recruiting a new specialist to the area. If the FQHC were not able to serve as the practice acquisition and physician recruitment organization, these communities might have lost these specialty services.

• **Quality of Physicians’ Personal Lives**

Family and personal lives are influencing physician practice choices. A hospital-employed physician said that new physicians have a different set of expectations for the time they devote to medical practice. Many newer physicians do not want to take emergency room call -- it used to be that if a patient was in the emergency room, so was that patient’s physician. This may contribute to hospital-physician tensions as hospitals seek emergency room coverage from increasingly reluctant physicians. New physicians want a quality of life that allows them to work, but to work less and have more time with their families than older colleagues. More experienced physicians have said that in looking back on their careers that they spent too much time working and not enough time with their families. Another respondent speculated that women physicians have advocated for more accommodating hospital employment arrangements, which has introduced pressure across the spectrum to accommodate quality of life.

A respondent from a Maine university noted that large, group practices can provide a rich advantage over small settings from a lifestyle and financial perspective. Group practices offer a far less isolating approach to rural health care and interdisciplinary teams can serve a broader variety of patient needs. Multiple physicians in a single specialty practice offer the collegiality of many professionals talking about cases and providing peer review exercises. It also provides alternatives for on-call coverage; otherwise, many physicians are the only providers around making it difficult for them to leave for continuing medical education or vacation.

• **Employment Packages**

Facility-based practices can offer an attractive employment package to physicians. A paycheck, benefits, and established office infrastructure have been important in attracting new physicians. A Maine FQHC has found that the only way to recruit specialists into their community is through employment with guaranteed payment. Their small, rural community cannot attract new hires by asking physicians with multiple opportunities to gamble on making a living in their market. To attract a replacement physician, salary, benefits, and a built-in reception and billing staff are necessary. New physicians are not willing to assume the risk of opening a solo practice. An employment situation combines both business economics and clinical quality. Other respondents
concurred, noting that salary is far more appealing than having to establish and operate a small business, especially among new physicians with significant medical school debt.

**Costs and Benefits of These Arrangements**

This section identifies the costs and benefits associated with practicing in large group and employment arrangements. In addition to the financial costs described in the background section, there are other disadvantages to these arrangements including the influence of salary on physician productivity, facility clinical requirements, and the time between electronic medical record (EMR) implementation and return on investment. These trends have also yielded benefits such as greater resource availability to support: participation in quality assurance initiatives; expanded services and providers; reduced practice administration costs; EMR implementation; physician recruitment efforts; improved bargaining power for better payment rates with commercial payers; and preserved access to physicians.

**Costs**

- **Salary and Productivity**

Respondents noted that physician productivity may decline in employment situations, where physicians receive a salary. (Some large group practices use incentive compensation to minimize this issue.) Salary pays physicians regardless of their expenses and the number and type of patients they see. Independent practices typically pay physicians based on cash receipts or revenue, directly reflecting patients seen throughout a physician’s work day. If the practice runs over its expense budget, physicians see that in their compensation. Alternatively, private practice physicians can find being paid on accounts receivable inconsistent. One physician observed that in private practice it is hard to know how much or if you can be paid, which can impact negotiations with banks to buy a home or to develop an agreement for student loan repayment.

- **Clinical Requirements**

Large group and employment arrangements may impose requirements that impact physicians’ clinical work. A private practice specialty physician noted that hospitals may set productivity standards. This physician wants to remain independent in clinical decisions and is committed to maintaining a private practice for that reason. A specialty practice decided against selling to a large group practice for the time being because they like their autonomy and want to control their schedules; however, a sale remains possible. An article in *The Washington Post* described salaried physicians as being closely monitored for productivity, leading to more and shorter appointments throughout the day.31

- **EMR is Not a Quick Fix**

The installation of EMR packages may compel physicians to practice in new and regimented ways, affecting their job satisfaction. For example, with most EMR packages, physicians must
dictate patient notes during patient visits rather than at some later time. This can slow appointments as physicians learn these systems. Additionally, EMR installation is an expensive long-term investment that does not lead to immediate cost savings. At the time of a merger between a hospital-based RHC with six clinic sites and a New Hampshire FQHC, the FQHC had an EMR. All the RHC sites had to convert, spending up to six months planning, preparing, and training for the change. EMRs and other health information technologies also require staff support. The New Hampshire FQHC described above currently has four full-time information technology staff and one full-time equivalent for quality reporting.

A representative of a Maine professional association notes that physicians need to invest in electronic medical records or pay-for-performance; however, solo practice physicians cannot afford this investment. It is much easier to let the hospital buy the practice and outfit it with technology. A study of electronic health record use in Massachusetts found that half of physician offices were using these tools. However, EMR adoption was lower among small practices, practices not affiliated with hospitals, and those that did not teach medical students or residents.

Benefits

- **Reduced Practice Administration Costs**

A Maine FQHC employs over 100 practitioners and expects to provide care to about half the population of its service area during 2007. The number of physicians at this FQHC has grown significantly, which helps to keep administrative costs low. About 10% of costs go to administration which includes billing, administrative personnel, and clinical leadership. These economies of scale have made it possible to serve greater numbers of the uninsured. A New Hampshire FQHC has used its federal grant funding to make infrastructure improvements such as administrative staff training, computer hardware and software upgrades, and expanded capacity to serve more patients.

- **EMR Implementation**

Large settings allow for the expense of putting in an EMR. A Maine FQHC has nearly completed installation of an EMR system, adding to their ability to address quality assurance initiatives as well as contributing to their ability to recruit new physicians. An FQHC in New Hampshire has completely converted to an electronic database that integrates demographic and clinical information in one place. The documentation has improved the health center’s ability to participate in quality improvement activities. Another New Hampshire FQHC uses 18 quality indicators practice-wide generated from its EMR. These indicators provide feedback to physicians and other providers and drive evidence-based practice. These measures are also used to guide large scale quality improvement initiatives, such as the FQHC’s current diabetes initiative. The EMR is also connected to a hospital surgery floor and its emergency room.
Participation in Quality Improvement Initiatives

Many interviewees at FQHCs and large group practices noted that their setting provided financial security, leading to the pursuit of other important goals, such as active participation in quality assurance initiatives. For example, an FQHC in Maine expects to be awarded an FQHC Joint Commission accreditation in the coming year. Nationally, quality indicators at community health centers (CHCs) suggest that these centers are providing greater continuity of care than other sites and that continuity of care, provision of routine check-ups, and visits including immunizations have increased over time. In addition to cardiac and spine initiatives and a chronic disease registry, all primary care physicians at a multi-specialty group practice in Maine have received a national diabetes certification. The financial stability and solid infrastructure allows another Maine FQHC to focus on other issues. For example, this FQHC belongs to the Health Disparities Collaborative on Diabetes and has implemented an EMR. This FQHC has now aligned with a local hospital’s residency program and has actually had two residents approach them about employment. They believe their larger number of diverse providers (they now have 20 health care providers) are attracting residents.

Facilities and medical groups may provide an advantage over small physician practices in implementing quality improvement initiatives. The literature suggests that implementing quality improvement initiatives within facilities and groups may prove more successful than attempting these initiatives within small practices. Interviews with health care leaders and administrators revealed the opinion that groups must be at least moderately sized in order to engage in organized processes to improve care and that only groups have enough patients to reliably measure quality. In California, large, multi-specialty medical groups were found to have adopted and value quality management tools to a greater degree than physicians practicing in solo or small-groups. Solo practitioners have been found less likely to follow clinical guidelines for care of patients with acute myocardial infarction than practices with two or more physicians. Other research suggests that even large medical groups do not have the organized processes in place to improve quality of care, lacking necessary incentives and technology.

Expanded Services and Providers

In some settings, such as FQHCs, the trend toward larger settings has contributed to expanded services and providers. Some respondents noted that these services may include dental, mental health, pharmacy programs, chronic disease management, and case management and in some cases resulted in integrated, interdisciplinary patient care in multi-specialty group practices. A Maine FQHC provides outreach and enabling services to anyone, regardless of whether they are patients or not. This FQHC has brought 10 new dentists to the state, provides sliding fee scale dental services and a mobile dental clinic to rural low-income children. A New Hampshire FQHC reported that enhanced Medicaid reimbursement is very important and necessary in supporting the breadth of high quality interdisciplinary services offered to the difficult populations it serves. However, national analyses reveal access problems to specialty care for FQHC patients. FQHC medical directors report problems obtaining specialized medical and mental health services for patients covered by Medicaid and particularly for patients who are uninsured. Federal policies to expand CHCs have not led to substantial increases in on-site specialty services.
An FQHC in New Hampshire used its grant funds to develop more comprehensive health care programs, investing in mental health, dental care, and pharmacy services. In addition the funding was enough to provide for infrastructure improvements in the health center including administrative staff training, computer hardware and software upgrades, and improving general capacity of the health center to serve more patients. A Maine FQHC has added three specialty practices to its primary care services. Adding these specialties has generated referrals and access to specialty care and assures community access to a range of services; however, it has made minimal difference financially because specialists are not reimbursed under the FQHC designation.

Nationally, we know that community health centers serve a large portion of the clinically vulnerable. Between 1994 and 2001, persons with chronic conditions accounted for a growing proportion of visits at community health centers (14.0 percent compared to 17.8 percent). Established patients seen for continuing care also increased and more visits included follow-up plans during this time.  

- **Ensuring Access for Medicaid Beneficiaries**

With solo practitioners less able to provide care and often limiting the number of Medicaid patients they see, Medicaid beneficiaries are becoming more concentrated among fewer, larger provider groups which are less likely to limit Medicaid beneficiaries. A Maine primary care physician moved from a large corporate organization into solo practice to have greater control over his work environment; however, in doing so, this physician limits MaineCare patients to remain financially viable. If MaineCare paid independent physicians the same way it pays hospitals and clinics, this physician could take more MaineCare patients.

Comparing data from the 2000 and 2004 Maine Physician Licensing Survey, we found that fewer solo practice physicians treat MaineCare patients or accept new MaineCare patients (Table 6). Additionally, the proportion of solo practice physicians who limit the number of MaineCare patients in their practice has increased.

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<tbody>
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<td>Treats Medicaid</td>
<td>91.2%</td>
<td>86.4%</td>
<td>98.9%</td>
<td>97.3%</td>
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<td>Limits Medicaid</td>
<td>27.5%</td>
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<td>19.8%</td>
<td>23.2%</td>
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<tr>
<td>Accepts New Medicaid</td>
<td>75.4%</td>
<td>66.5%</td>
<td>84.8%</td>
<td>82.6%</td>
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Source: Maine Physician Resource Inventory Data.

In both 2000 and 2004, nearly all group practice owners or employees and facility employees treated MaineCare patients. More physicians in these settings accept new MaineCare patients.
compared to solo practitioners. Among facility employees in 2004, less than 3% limited MaineCare patients, down from 7.5% in 2000. It appears that larger practice settings are maintaining settings open to Medicaid while solo practitioners have decreased their caseloads. It should be noted that FQHCs are expected to serve all Medicaid patients that approach them.

An additional benefit is that payer source loses relevance for physicians in large group and employment arrangements. In a solo practice, physicians must know who insures the patient; in a group practice, that becomes less important. A hospital-employed physician told us he sees all patients, regardless of insurance status, something that physicians in private practice may not be able to do. This physician does not need to know the type of insurance coverage his patients have, only the reason for their visit. A multi-specialty group practice in Maine no longer accepts new MaineCare patients, a change prompted by the claims processing problems of MaineCare’s new system. The practice’s MaineCare volume was sufficiently low that they were able to close to MaineCare patients without experiencing significant financial loss; practices with a large portion of their practice insured through MaineCare do not have this luxury.

A rural health advocate considers the proliferation of FQHCs and RHCs in Maine to have increased access for the uninsured and underinsured. This advocate points out that many small employers in Maine offer high deductible health insurance plans and these beneficiaries may not be able to afford their deductible or co-payment. These Mainers may benefit from the sliding fee scale to cover the cost of their deductible or co-payment under the RHC and FQHC programs.

Summary and Policy Implications

Summary

Trends

- Nationally and in Maine, physicians have moved from independent, small, or solo practices to hospital or clinic employment and large group practice arrangements.

- Our interviews, literature review, and data analysis identified changes to physician practice beginning in the early 1990s and continuing through the present. Our interviews suggest that the rate of movement towards larger settings has slowed.

- Nationally, primary care physicians have entered medical practice in somewhat smaller numbers in recent years. Declines in practice income and career satisfaction are apparent across all types of physicians. In Maine, physicians have fewer residency options and many experienced physicians are approaching retirement age.

Drivers

- Two major forces have contributed to these changes. The first is low reimbursement from all payers, with particular emphasis on Medicaid reimbursement. The second force is physicians’ preferences for practicing medicine that have led them to employment or large-
group arrangements. These preferences include retirement, family commitments, and quality of personal lives. The extent to which each of these forces contributes to these changes is unknown.

- There are also two market issues influencing these changes. There are fewer primary care physicians graduating from medical school. In addition, as some areas have lost primary care physicians, hospitals have begun competing for primary care physician employees in order to maintain continuity of care in their service areas.

- Small practices consistently identified costly and complex administrative burdens that limit the capacity and sustainability of the practice such as human resources, billing, coding, and health information technology.

- Sustaining a practice as a physician transitions to retirement was cited frequently as a reason for selling a practice to a hospital or becoming part of an FQHC. Additionally, health facilities have found their employment packages to be a strong part of recruiting new physicians.

**Impacts**

- Between 2000 and 2006, MaineCare cost increases were driven by greater service use among hospital outpatient departments, RHCs, and FQHCs. Costs per patient and per provider have increased substantially in these settings. By contrast, costs in physician offices have made more modest increases.

- New Hampshire Medicaid costs have increased by each practice type between 2004 and 2006. Hospital outpatient costs increased at a lower rate than other services, due to a decrease in payment rates. The rate of increase among members using physician office services occurred at a lower rate than outpatient and clinic settings.

- Medicaid beneficiaries are concentrated among fewer providers, with solo practitioners less able to provide care and often limiting the number of Medicaid patients they see. By contrast, only 3% of facilities limit Medicaid patients.

- Especially in the case of FQHCs, Medicaid beneficiaries are exposed to greater availability of a full range of health services, including mental health, dental care, and specialty physician services.

- The economies of scale achieved in large group or facility settings provides greater potential for improving and streamlining practice management, quality improvement, and EMR initiatives over solo practices.

**Policy Implications**

- There are few policy options available to state governments to influence physician preferences in the practice of medicine. Increased reimbursement is unlikely to draw
physicians away from facility-based practice, though it would support the physicians that remain in office settings and introduce equity in payment for services that differ only in location or arrangement.

- Since 2002 the Federal Health Center Growth Initiative has added new Community Health Centers/FQHCs and/or added new sites or expanded services at existing Centers. States’ authority to influence these changes is limited to the designation of health professional shortage areas. Absent authority to plan or designate the development and location of these facilities, it is important that Maine and New Hampshire make their Medicaid access needs and priorities known to FQHCs, RHCs, and their associations to ensure consideration in the future development of new facilities and sites.

- Although Maine and New Hampshire cannot reverse the tide of changes in practice arrangements, they can work with practices to develop policy and other initiatives to promote access to high quality, efficient care for Medicaid beneficiaries. A starting point for this would be to examine the performance of practices throughout the state on key access, quality, and cost measures to determine whether these new arrangements provide enhanced value for the Medicaid program.

- Access to services for Medicaid beneficiaries is tied to recruitment and retention of physicians. Our work suggests that the trend toward physician employment is driven in part by an effort to enhance physician recruitment and retention. This is thought to ensure access to primary and specialty care for Medicaid beneficiaries, particularly as solo practitioners move away from providing this care. It is important for Maine and New Hampshire to monitor physician recruitment and retention, particularly as they affect access to services for Medicaid beneficiaries.

- Maine and New Hampshire should consider whether these new practice arrangements are organized to deliver higher quality care through HIT or other practice-based initiatives in comparison to solo providers.

- Currently, states pay higher reimbursement rates for FQHCs and RHCs though they have limited authority over those designations. This study demonstrates that FQHC and RHC sites and services are increasing in prominence in Maine and New Hampshire. Maine and New Hampshire should consider their roles in supporting the care delivered in these sites and assure that the increased payments for services delivered in these sites result from the ability of those centers to deliver comprehensive, high quality services. In addition, Maine and New Hampshire should continue discussions with the Centers for Medicare & Medicaid Services, the Health Resources and Services Administration and other federal and state agencies charged with administering these programs to have input into their location, administration, and reimbursement. At the local level, state policymakers should seek a partnership with the Maine Primary Care Association or the New Hampshire Bi-State Primary Care Association to participate in the creation of new or expanded community health center sites.
Appendix 1: Data Sources to Track Physician Practice Changes

This project sought to examine existing data sources in Maine and New Hampshire to examine trends in physician practice arrangements. Additionally, these sources were to help inform the context of the qualitative interviews. A list of potential data sources was developed. Appendix 2 provides a summary of each source reviewed. We used the criteria below to evaluate these sources.

1.) Sufficient historical data available. We sought to examine data from 2000-2006 at a minimum. Based on interviews suggesting that this trend started during the 1990s, a longer history may have been preferred; however, few existing sources could provide the 2000-2006 detail.

2.) Information in electronic format. Primary data collection was beyond the scope of this project. All data identified existed in electronic format.

3.) Consistent definition over time. Ideally, the data set definition, measurement techniques, and analytical methodologies should not change over time. The data set should contain minimal changes in analytical and measurement techniques.

4.) Data should sufficiently identify Maine and New Hampshire physician practices and relevant practice type information.

5.) Data on use of physician services should be identifiable.

No data sources identified meet all criteria. The Maine and New Hampshire all-payer data sets were not reviewed due to the lack of sufficient history. These data may provide a source for tracking this information in the future if the problem with global billing of physician services on hospital outpatient payments can be resolved. Maine is working to improve this situation with legislation and a proposal to the National Uniform Billing Committee.

MaineCare and New Hampshire claims data provide history for providers enrolled in Medicaid. We provide analysis of these data throughout the text and in tables below to offer context to the low reimbursement rate discussion. The global billing of services is also a problem with the outpatient claims. We examined several algorithms for identifying primary care physician services based on combinations of clinic and professional revenue codes. Results for the selected algorithm for MaineCare outpatient services are presented in Appendix 3. Other algorithms led to different dollar amounts; however, the trend towards higher payments in these setting remained consistent.

The Maine Hospital Outpatient Data Set looked most promising for the analysis of hospital affiliated practices. The Outpatient data set covers all outpatient visits regardless of source of payment. An algorithm similar to the one used with the claims data was attempted. In addition to revenue codes, procedure codes were available and included. Two analyses were attempted – identifying trends in visits and physicians associated with those visits. In both cases the numbers of visits and physicians looked high compared with information from the Maine Hospital Association’s Annual Survey of Hospitals and MHDO CH 630 data. However, these sources count physicians actually employed by the hospital while the outpatient data also include visits to physicians who are contracted by the hospital. Also some physicians had outpatient visits at several hospitals, which would inflate the hospital level numbers.
Staff at the Maine Health Data Organization (MHDO) and the Maine Health Information Center (MHIC) was consulted. MHIC provided additional specificity on the revenue and procedure codes to examine this issue. MHDO staff clarified the physician identifiers and how to best identify physicians of interest. While claims identify attending and other types of doctors, there appears to be variability in how these data are entered for primary care and clinic type visits. At this point, we are not confident with how our algorithm identified these services. However, we did find these data to support trends identified in the claims data.

According to staff at New Hampshire Health Statistics and Data Management, the state’s outpatient data do not capture these types of visits.

The Quality Evaluation and Information Management System (QIES) system includes FQHCs, RHCs and hospitals; physicians are not included. Unfortunately these data were of limited use due to timeliness; however, they do track open and close dates and other information for licensing and certification. They are updated at time of licensure and survey.

Providers participating in the MaineCare primary care case management (PCCM) program are tracked in a system called MOOSE (this is not an acronym). This system identified PCCM “practice sites” and dates back to 2000. It also identified PCCM sites as FQHC/RHC, physician, and hospital affiliated practices; however, it does not track the practice type designation over time. Additionally, the data are limited to MaineCare PCCM providers and does not include members with disabilities or the elderly. It does contain information for other insurers.

Additionally, Medicare cost reports were identified as an additional source of information on FQHCs, RHCs, and hospitals. The data are available from the Centers for Medicare & Medicaid Services; however, analytic files needed to be constructed. We did not have the resources to construct these files for this project.
Appendix 2: Data Sources and Limitations

<table>
<thead>
<tr>
<th>Source and Description</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine Physician Resource Inventory – A survey of licensed</td>
<td>Hospital-owned clinics are not identifiable with these data. Ambiguously worded questions and inconsistent responses by physicians make it difficult to interpret these data. For example, among physicians from the same group practice, some physicians described their practice as facility-owned while others said physician-owned. We recommend that the state work with Maine CDC’s Office of Data, Research, and Vital Statistics to improve the survey instrument.</td>
</tr>
<tr>
<td>physicians that allows for the examination of physician</td>
<td>Data were available for 2000 and 2004. Data for 2006 are not expected to be available until sometime in 2008.</td>
</tr>
<tr>
<td>employment (e.g., owner in solo practice, employee in group</td>
<td>No similar data are available for New Hampshire.</td>
</tr>
<tr>
<td>practice) and setting (e.g., hospital, office, clinic).</td>
<td></td>
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<tr>
<td>Uniform Outpatient Dataset – These encounter data contain</td>
<td>These data do not allow us to determine which physicians are employed with confidence. The data pick up both the performing, operating and referring physicians and this may not accurately reflect who is employed by the hospital.</td>
</tr>
<tr>
<td>patients who receive services in a formally organized</td>
<td>Using specific revenue, procedure codes and provider specialty an algorithm to identify visits that would be associated with physician office visits was developed and examined. The algorithm did not allow us to accurately identify hospital clinic type visits from non-hospital primary care visits. The counts of physicians appear over stated when compared to other data sources. Additionally, great variation exists in hospitals from year to year.</td>
</tr>
<tr>
<td>ambulatory department, clinic, and provider-based practice</td>
<td>These data are obtained from hospitals’ medical records departments and may contain incomplete data.</td>
</tr>
<tr>
<td>considered a department of the hospital, and/or other</td>
<td>New Hampshire’s outpatient dataset explicitly excludes data from the hospital-owned practices that are physically located off-site of the hospital.</td>
</tr>
<tr>
<td>departments of a hospital when those patients are not</td>
<td></td>
</tr>
<tr>
<td>considered to be inpatients. Data are collected and</td>
<td></td>
</tr>
<tr>
<td>compiled by the Maine Health Data Organization and</td>
<td></td>
</tr>
<tr>
<td>New Hampshire Division of Health Statistics and Data</td>
<td></td>
</tr>
<tr>
<td>Quality Evaluation and Information Management System (QIES) –</td>
<td>The hospital data are considered accurate at the time they are collected; however, the data are obtained at varying points in time, whenever the hospital receives its state or federal licensing and certification review. There can be up to a three-year difference when the data are obtained. Additionally, some hospitals are exempt from the survey process due to accreditation by another authorized body.</td>
</tr>
<tr>
<td>The Center for Medicaid and Medicare Services provides each</td>
<td>Not all facilities appear to be on the file.</td>
</tr>
<tr>
<td>state with QIES to license and monitor all health care</td>
<td></td>
</tr>
<tr>
<td>providers who provide Medicare and Medicaid services. Data</td>
<td></td>
</tr>
<tr>
<td>allow us to identify hospital providers that are offsite or</td>
<td></td>
</tr>
<tr>
<td>affiliated with main campuses. Data also identify Rural and</td>
<td></td>
</tr>
<tr>
<td>Federally Qualified Health Care Centers.</td>
<td></td>
</tr>
<tr>
<td><strong>MaineCare Claims Data</strong> – MaineCare administrative data including claims and provider files provide information on use of outpatient, physician, FQHC and RHC services, provider counts and members served. NH Medicaid claims data were used to identify similar services in NH.</td>
<td>For outpatient provider type, hospital affiliated providers can not be distinguished from traditional hospital-based outpatient departments. Provider identification is limited to the “hospital” billing id. Additionally, older data do not provide CPT-level codes to identify primary care type service use. While the new claims processing system allows for the collection of both HCPC and CPT codes – the edit restrictions have been relaxed to allow claims to process in the system without this information. Additionally, recent rule changes require reporting physician services on separate billing claims forms from the hospital may improve the use of data for this purpose. Services are for Medicaid members only.</td>
</tr>
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<tr>
<td><strong>All-Payer Data</strong> – The all-payer data contain state mandated health care claims and eligibility information submitted by health insurance carriers for both states.</td>
<td>These data are new, especially for New Hampshire. Maine’s all-payer data date to 2003, while New Hampshire’s dates to 2005. We did not analyze these data because we would not be able to see trends over time. Maine’s data contains commercial payers; MaineCare and Medicare are being added. New Hampshire’s data contain Medicaid and commercial payers. Claims information from hospital affiliated providers do not identify individual physicians. Recent rule changes to collect the servicing provider information should improve these data with time.</td>
</tr>
<tr>
<td><strong>MHDO 90 – 590, Chapter 630</strong> – These data show the physicians and groups purchased by hospitals. Hospitals are required to notify MHDO with any changes twice a year.</td>
<td>Data collection started in July 2007. First round of data collection has identified inconsistent and inaccurate reporting of practice acquisition. Data are for Maine only.</td>
</tr>
<tr>
<td><strong>MOOSE</strong> – MaineCare’s provider enrollment tracking system contains data from MaineCare Primary Care Case Management Providers and identifies the type of site a member enrolls with including FQHCs, RHCs, and hospital-owned practices.</td>
<td>Data are for Medicaid members enrolled in primary care case management (PCCM). Sites are limited to MaineCare PCCM; no specialists or primary care providers outside of the PCCM program are included. Members dually eligible for Medicare and Medicaid, disabled, in institutions, waivers and various others are not included. No similar data are available for New Hampshire.</td>
</tr>
<tr>
<td><strong>Community Tracking Survey</strong> – A nationally representative survey of physicians conducted in 1996-97, 1998-99, 2000-01, and 2004-05.</td>
<td>Data were not collected in sufficient number to identify physicians practicing in FQHCs or RHCs. Data were not identifiable by state.</td>
</tr>
<tr>
<td><strong>American Hospital Association</strong> – Annual survey of the members of the AHA.</td>
<td>Limited questions about physician practice relationships. We currently have data for 2004 only.</td>
</tr>
</tbody>
</table>
## Appendix 3: MaineCare Selected Physician Related Services
### SFY2006—Maine Providers Only

Services received 7/1/2005-6/30/2006 based on from date of service and paid by 9/23/2007.

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<td><strong>Members: [1]</strong></td>
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<tr>
<td><strong>Outpatient Total [2]</strong></td>
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<tr>
<td>Clinic Related:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Prof [3] Clinic [4]</td>
<td>110,944</td>
<td>35,525</td>
<td>11.3%</td>
<td>34</td>
<td>42</td>
<td>$10,526,503</td>
<td>361.7%</td>
<td>$296.31</td>
<td>$94.88</td>
<td></td>
</tr>
<tr>
<td>Prof Service No Clinic</td>
<td>103,064</td>
<td>33,423</td>
<td>10.7%</td>
<td>33</td>
<td>34</td>
<td>$14,151,187</td>
<td>1637.5%</td>
<td>$423.40</td>
<td>$137.30</td>
<td></td>
</tr>
<tr>
<td>Prof Service Clinic</td>
<td>63,749</td>
<td>21,412</td>
<td>6.8%</td>
<td>26</td>
<td>34</td>
<td>$5,010,256</td>
<td>2583.8%</td>
<td>$233.99</td>
<td>$78.59</td>
<td></td>
</tr>
<tr>
<td>All Clinic</td>
<td>174,693</td>
<td>51,885</td>
<td>16.5%</td>
<td>34</td>
<td>42</td>
<td>$15,536,759</td>
<td>529.9%</td>
<td>$299.45</td>
<td>$88.94</td>
<td></td>
</tr>
<tr>
<td><strong>Physician Total</strong></td>
<td>1,273,384</td>
<td>193,235</td>
<td>61.6%</td>
<td>1,024</td>
<td>2,558,460</td>
<td>$69,718,486</td>
<td>100.6%</td>
<td>$360.80</td>
<td>$27.25</td>
<td>$54.75</td>
</tr>
<tr>
<td>Specialist</td>
<td>704,735</td>
<td>141,313</td>
<td>45.1%</td>
<td>554</td>
<td>1,651,432</td>
<td>$42,831,487</td>
<td>122.6%</td>
<td>$303.10</td>
<td>$25.94</td>
<td>$60.78</td>
</tr>
<tr>
<td>Primary care [5]</td>
<td>568,702</td>
<td>123,235</td>
<td>39.3%</td>
<td>494</td>
<td>907,028</td>
<td>$26,886,999</td>
<td>76.1%</td>
<td>$218.18</td>
<td>$29.64</td>
<td>$47.28</td>
</tr>
<tr>
<td>RHC</td>
<td>279,751</td>
<td>44,752</td>
<td>14.3%</td>
<td>50</td>
<td>272,450</td>
<td>$20,572,964</td>
<td>402.5%</td>
<td>$459.71</td>
<td>$75.51</td>
<td>$73.54</td>
</tr>
<tr>
<td>FQHC</td>
<td>557,053</td>
<td>75,060</td>
<td>23.9%</td>
<td>44</td>
<td>535,520</td>
<td>$55,240,341</td>
<td>853.4%</td>
<td>$735.95</td>
<td>$103.15</td>
<td>$99.17</td>
</tr>
</tbody>
</table>

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[1] Member counts for 2000 are from the MaineCare MMDSS eligibility data housed on Muskie servers. Member counts for 2006 are from the MMDSS extract files created as of 10/2007. Members with limited coverage and state-only funded are excluded from counts.

[2] Outpatient total includes all outpatient services, including ED visits.

[3] Outpatient professional fees identified by revenue code centers U960, U969, U982, U983. ED visits are excluded.

[4] Outpatient clinic services identified by revenue code centers U510-U519. ED visits are excluded.

[5] Primary Care physicians identified with subspecialty general practice (109), family practice (110), OB/GYN (112), pediatrics (115) and internal medicine (132).

[6] Physician billing providers include group and solo practices. Numbers do not correspond directly to number of physicians. In 2000, the 1,061 billing providers accounted for 2,610 servicing providers; in 2006, 997 billing providers accounted for 2,953 servicing providers.

[7] Paid units incomplete on outpatient claims in MMDSS.

[8] Paid based on claims data and do not reflect any off-claim settlement or adjustments. Outpatient claim payments adjusted using cost-to-charge ratios for each hospital as specified by the Office of MaineCare Services.

Source: MaineCare MMDSS extract at Muskie School with claims incurred and paid by 9/23/2007.
Appendix 3 (Continued): MaineCare Selected Physician Related Services  
SFY2000—Maine Providers Only

Services received 7/1/1999-6/30/2000 based on from date of service and paid by 1/25/2005.

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</thead>
<tbody>
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<td>Members: [1]</td>
<td>169,921</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total Outpatient [2]</td>
<td>379,953</td>
<td>89,658</td>
<td>52.8%</td>
<td>40</td>
<td>1,684,229</td>
<td>$35,774,320</td>
<td>$399.01</td>
<td>$21.24</td>
<td>$94.15</td>
</tr>
<tr>
<td>Clinic Related:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Prof Service</td>
<td>No Clinic</td>
<td>17,814</td>
<td>7,103</td>
<td>4.2%</td>
<td>22</td>
<td>71,563</td>
<td>$814,464</td>
<td>$114.66</td>
<td>$11.38</td>
</tr>
<tr>
<td>Prof Service</td>
<td>Clinic</td>
<td>3,621</td>
<td>2,483</td>
<td>1.5%</td>
<td>12</td>
<td>14,886</td>
<td>$186,686</td>
<td>$75.19</td>
<td>$12.54</td>
</tr>
<tr>
<td>All Clinic</td>
<td></td>
<td>50,809</td>
<td>18,787</td>
<td>11.1%</td>
<td>36</td>
<td>122,471</td>
<td>$2,466,540</td>
<td>$131.29</td>
<td>$20.14</td>
</tr>
<tr>
<td>Total Physician</td>
<td></td>
<td>591,280</td>
<td>106,221</td>
<td>62.5%</td>
<td>1,060</td>
<td>1,126,306</td>
<td>$34,753,649</td>
<td>$327.18</td>
<td>$30.86</td>
</tr>
<tr>
<td>Specialist</td>
<td></td>
<td>375,246</td>
<td>83,739</td>
<td>49.3%</td>
<td>501</td>
<td>483,487</td>
<td>$19,237,854</td>
<td>$229.74</td>
<td>$39.79</td>
</tr>
<tr>
<td>RHC</td>
<td></td>
<td>65,650</td>
<td>17,180</td>
<td>10.1%</td>
<td>56</td>
<td>84,706</td>
<td>$4,093,895</td>
<td>$238.29</td>
<td>$48.33</td>
</tr>
<tr>
<td>FQHC</td>
<td></td>
<td>71,039</td>
<td>15,092</td>
<td>8.9%</td>
<td>30</td>
<td>79,670</td>
<td>$5,794,008</td>
<td>$383.91</td>
<td>$72.73</td>
</tr>
</tbody>
</table>

[1] Member counts for 2000 are from the MaineCare MMDSS eligibility data housed on Muskie servers. Member counts for 2006 are from the MMDSS extract files created as of 10/2007. Members with drug only programs and state-only funded are excluded from counts.

[2] Outpatient total includes all outpatient services, including ED visits.

[3] Outpatient professional fees identified by revenue code centers U960, U969, U982, U983. ED visits are excluded.

[4] Outpatient clinic services identified by revenue code centers U510-U519. ED visits are excluded.

[5] Primary care physicians identified with subspecialty general practice, family practice, OB/GYN, Pediatrics, and internal medicine. 6,599 claims had no specialty indicated.

[6] Physician billing providers include group and solo practices. Numbers do not correspond directly to number of physicians. In 2000, the 1,061 billing providers accounted for 2,610 servicing providers; in 2006, 997 billing providers accounted for 2,953 servicing providers.

[7] Outpatient paid amounts use the hospital adjustment criteria developed by the Department and in use prior to 2007. Source: MaineCare MMDSS (pre-MECMS) at Muskie School with claims incurred and paid by 1/25/2005.
## Appendix 4: New Hampshire Medicaid Selected Physician Related Services
### SFY 2000 and SFY 2006—New Hampshire Providers Only


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<tbody>
<tr>
<td><strong>SFY 2006</strong></td>
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<tr>
<td>Members [3]</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Outpatient</td>
<td>380,447</td>
<td>73,836</td>
<td>55.4%</td>
<td>34</td>
<td>$55,874,802</td>
<td>$757</td>
<td>$1,643,377</td>
<td>$146.87</td>
</tr>
<tr>
<td>Physician</td>
<td>688,877</td>
<td>92,985</td>
<td>69.8%</td>
<td>841</td>
<td>$36,934,916</td>
<td>$397</td>
<td>$43,918</td>
<td>$53.62</td>
</tr>
<tr>
<td>RHC/FQHC</td>
<td>100,230</td>
<td>21,370</td>
<td>16.0%</td>
<td>34</td>
<td>$10,456,831</td>
<td>$489</td>
<td>$307,554</td>
<td>$104.33</td>
</tr>
<tr>
<td><strong>SFY 2004</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient</td>
<td>283,307</td>
<td>62,808</td>
<td>47.1%</td>
<td>37</td>
<td>$52,151,323</td>
<td>$830</td>
<td>$1,409,495</td>
<td>$184.08</td>
</tr>
<tr>
<td>Physician</td>
<td>640,666</td>
<td>87,792</td>
<td>65.9%</td>
<td>823</td>
<td>$30,799,304</td>
<td>$351</td>
<td>$37,423</td>
<td>$48.07</td>
</tr>
<tr>
<td>RHC/FQHC</td>
<td>92,424</td>
<td>19,402</td>
<td>14.6%</td>
<td>35</td>
<td>$8,435,348</td>
<td>$435</td>
<td>$241,010</td>
<td>$91.27</td>
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<td><strong>SFY 2000 [4]</strong></td>
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<td>Members [3]</td>
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<tr>
<td>Outpatient</td>
<td>191,885</td>
<td>45,153</td>
<td>41.7%</td>
<td>38</td>
<td>$30,862,960</td>
<td>$684</td>
<td>$812,183</td>
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<td>Physician</td>
<td>447,616</td>
<td>64,378</td>
<td>59.5%</td>
<td>838</td>
<td>$17,845,316</td>
<td>$277</td>
<td>$21,295</td>
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<tr>
<td>RHC/FQHC</td>
<td>70,122</td>
<td>14,981</td>
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<td>36</td>
<td>$5,650,115</td>
<td>$377</td>
<td>$156,948</td>
<td>$80.58</td>
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</table>

Data provided by Andrew Chalsma, NH Department of Health and Human Services.

[1] Physician billing providers include group and solo practices.
[3] Count of distinct members with full benefits enrolled at any time during the year.
[4] In 2000, NH Medicaid contracted with a health maintenance organization (HMO) to cover some of its members. Member services were paid by a monthly capitation rate. Data were not available to determine how much was spent for members in the HMO by category of service. Therefore the information for 2000, understates the actually use of these services.
## Appendix 5: Maine Physician Resource Inventory 2000 – 2004

### Survey Responses

<table>
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<tr>
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<tbody>
<tr>
<td>Physicians</td>
<td>2622</td>
<td></td>
<td>3608</td>
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<td>37.6%</td>
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<td>Active Physicians [1]</td>
<td>2559</td>
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<td>Accepting New Patients</td>
<td>2182</td>
<td>85.3%</td>
<td>2707</td>
<td>83.5%</td>
<td>24.1%</td>
<td>-2.1%</td>
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<tr>
<td>Accepts New Medicare Part B Assignments</td>
<td>2232</td>
<td>87.2%</td>
<td>2698</td>
<td>83.2%</td>
<td>20.9%</td>
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<td>Accepts New MaineCare</td>
<td>1975</td>
<td>77.2%</td>
<td>2330</td>
<td>71.8%</td>
<td>18.0%</td>
<td>-6.9%</td>
</tr>
<tr>
<td>Treats MaineCare</td>
<td>2365</td>
<td>92.4%</td>
<td>2847</td>
<td>87.8%</td>
<td>20.4%</td>
<td>-5.0%</td>
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<tr>
<td>Limits MaineCare</td>
<td>371</td>
<td>14.5%</td>
<td>371</td>
<td>11.4%</td>
<td>0.0%</td>
<td>-21.1%</td>
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<tr>
<td>Average MaineCare Percent of Practice</td>
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<td>19.4%</td>
<td>25.5%</td>
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<td><strong>Work Setting: [3]</strong></td>
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<tr>
<td>Hospital</td>
<td>789</td>
<td>30.8%</td>
<td>1063</td>
<td>32.8%</td>
<td>34.7%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Office/Clinics</td>
<td>1632</td>
<td>63.8%</td>
<td>1889</td>
<td>58.2%</td>
<td>15.7%</td>
<td>-8.7%</td>
</tr>
<tr>
<td>Nursing Homes/Rest Home</td>
<td>8</td>
<td>0.3%</td>
<td>14</td>
<td>0.4%</td>
<td>75.0%</td>
<td>38.1%</td>
</tr>
<tr>
<td>School/University</td>
<td>22</td>
<td>0.9%</td>
<td>38</td>
<td>1.2%</td>
<td>72.7%</td>
<td>36.3%</td>
</tr>
<tr>
<td>Federal/Military</td>
<td>34</td>
<td>1.3%</td>
<td>44</td>
<td>1.4%</td>
<td>29.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Research/Regulatory</td>
<td>8</td>
<td>0.3%</td>
<td>20</td>
<td>0.6%</td>
<td>150.0%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Other</td>
<td>53</td>
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<td>96</td>
<td>3.0%</td>
<td>81.1%</td>
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<td>Missing</td>
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<tr>
<td>Solo Practice</td>
<td>629</td>
<td>24.6%</td>
<td>638</td>
<td>19.7%</td>
<td>1.4%</td>
<td>-20.0%</td>
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<tr>
<td>Group Practice</td>
<td>1211</td>
<td>47.3%</td>
<td>1424</td>
<td>43.9%</td>
<td>17.6%</td>
<td>-7.2%</td>
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<tr>
<td>Facility</td>
<td>560</td>
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<td>792</td>
<td>24.4%</td>
<td>41.4%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Government</td>
<td>67</td>
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<td>114</td>
<td>3.5%</td>
<td>70.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Other</td>
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<td>3.9%</td>
<td>62.3%</td>
<td>28.1%</td>
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<td><strong>Work Setting is Office/Clinic:</strong></td>
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<tr>
<td><strong>Primary Form of Employment:</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility</td>
<td>221</td>
<td>13.5%</td>
<td>265</td>
<td>14.0%</td>
<td>19.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Physician Practice</td>
<td>1361</td>
<td>83.4%</td>
<td>1495</td>
<td>79.1%</td>
<td>9.8%</td>
<td>-5.1%</td>
</tr>
</tbody>
</table>

[1] Excludes physicians not currently active or did not have any worked weeks in Maine during the survey year.
[2] Percent calculation is based on active physicians. Questions had varying numbers of missing or invalid responses data along with valid negative responses. For ease of presentation only affirmative responses are shown as a percent of all active physicians.
[3] Work setting assigned from survey responses as follows:
  • Hospital includes hospital
  • NF/rest home includes “nursing home, etc”
  • Office/clinic includes clinic, group health plan facility, office, & community health center
  • School/university includes med/dental school, nursing school, other university/college, facility for disabled, elm/high school, and other school
  • Federal/military facility includes military installation and “VA, public health, Indian”
  • Research/regulatory includes Med research inst and admin/reg agency
  • Other includes patient home, prof/allied health assoc, mfg establishment, trade establishment, & other
[4] Employment type assigned from survey responses as follows: owner solo practice includes self-employed solo practice; owner in group practice includes self-employed partnership; employee in group practice includes individual practitioner, partnership/group practice, & group health plan facility; facility includes other nongovernmental; and other includes all other employment types.
References


http://www.ama-assn.org/ama/pub/upload/mm/399/sgr_states_me.pdf


