In Search of Joy in Practice: A Report of 23 High-Functioning Primary Care Practices

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ABSTRACT
We highlight primary care innovations gathered from high-functioning primary care practices, innovations we believe can facilitate joy in practice and mitigate physician burnout. To do so, we made site visits to 23 high-performing primary care practices and focused on how these practices distribute functions among the team, use technology to their advantage, improve outcomes with data, and make the job of primary care feasible and enjoyable as a life's vocation. Innovations identified include (1) proactive planned care, with previsit planning and previsit laboratory tests; (2) sharing clinical care among a team, with expanded rooming protocols, standing orders, and panel management; (3) sharing clerical tasks with collaborative documentation (scribing), nonphysician order entry, and streamlined prescription management; (4) improving communication by verbal messaging and in-box management; and (5) improving team functioning through co-location, team meetings, and work flow mapping. Our observations suggest that a shift from a physician-centric model of work distribution and responsibility to a shared-care model, with a higher level of clinical support staff per physician and frequent forums for communication, can result in high-functioning teams, improved professional satisfaction, and greater joy in practice.

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INTRODUCTION
By all reports, primary care physicians are at high risk of burnout.1-3 Fewer physicians are choosing primary care, many are leaving it.4-6 Although waning interest in adult primary care careers is multifactorial, driven by such forces as the primary care–subspecialty income gap, medical schools’ devaluing of primary care, and the unsustainable primary care work life, we focus on the work life issue. One study suggests that the difficult work life may be the most influential factor discouraging medical students from primary care careers.7

Those who practice adult primary care are often deeply dissatisfied,1 spending much of their days performing functions that do not require their professional training.8 More than one-half of general internists and family physicians have symptoms of burnout.1 Time pressure, chaotic work environments, increasing administrative and regulatory demands, an expanding knowledge base, fragmentation of care delivery, and greater expectations placed on primary care contribute to the strain.9 Workdays are getting longer10 and rewards are diminishing. Joy is in short supply.

We propose joy in practice as a deliberately provocative concept to describe what we believe is missing in the physician experience of primary care. The concept of physician satisfaction suggests innovations that are limited to tweaking compensation or panel size. If, however, as the litera-
ture suggests, physicians seek out the arduous field of medicine, and primary care in particular, as a calling because of their desire to create healing relationships with patients, then interventions must go far deeper. Joy in practice implies a fundamental redesign of the medical encounter to restore the healing relationship of patients with their physicians and health care systems.

Joy in practice includes a high level of physician work life satisfaction, a low level of burnout, and a feeling that medical practice is fulfilling. Physicians who dread going to work each day are not experiencing joy in practice.11-17 Physician fulfillment in daily work is tightly related to the organization of the practice environment, including relief from paperwork and administrative hassles,18,19 the opportunity to form meaningful relationships with patients,20,21 and the ability to provide high-quality care to patients.22

Why should joy in practice matter? Physician burnout is associated with diminished patient satisfaction and reduced adherence to treatment plans;2,11,12 it also contributes to students’ avoidance of primary care careers.13

In the face of the dismal current primary care climate, we explored whether there are places where physicians and other staff are thriving and whether some practices have found innovative solutions to the challenges of office organization. This report focuses on practice innovations that we believe can address barriers to the healing relationship between physician and patient, take advantage of the resources of the health care team, and improve care for patients, thereby enhancing physician joy in practice.

We approached 23 high-performing practices we believed were likely to support both quality of care and physician work life satisfaction. The practices represented different geographic regions and include small private practices, large integrated delivery systems, academic medical centers, the Veterans Affairs, and Federally Qualified Health Care Centers.

Most of the practices had achieved patient-centered medical home recognition. Participation in meaningful use electronic health records and the Physician Quality and Reporting System were also tracked as surrogate markers of quality (Supplemental Appendix 1, http://annfammed.org/content/11/3/272/suppl/DC1). Our study was certified as exempt by the University of California San Francisco Human Research Protection Program Committee on Human Research.

Site Visits

At least 1 of the authors visited each of 21 sites (Table 1), shadowing physicians and their teams for a day and meeting with administrative and clinical leaders. We made virtual visits to 2 additional practices with a telephone interview and follow-up e-mail communication with leaders or practitioners. A semistructured site visit questionnaire (Supplemental Appendix 2, available online-only at http://annfammed.org/content/11/3/272/suppl/DC1) guided observations and interviews.

Although a description of how these practices made their changes, as well as quantitative data as to whether these changes directly and independently improved patient care, is beyond the scope of this report, a narrative summary describing in greater depth the care model and in some cases the change process, along with the investigators’ personal reflections on the mod-

### Table 1. Specialty, Setting, and Clinicians at Study Sites

| Site                                                        | Specialty | Setting | No. of Physicians |
|-------------------------------------------------------------|-----------|---------|-------------------|
| In-person visits                                            |           |         |                   |
| Ambulatory Practice of the Future                           | GIM       | Urban   | 2                 |
| Brigham and Woman’s Hospital                                | GIM       | Urban   | 7                 |
| Cleveland Clinic Strongsville                               | FM        | Suburban| 103               |
| Clinica Family Health Services                              | FM        | Rural   | 46                |
| Clinic Ole                                                  | FM        | Rural   | 15                |
| Fairview Rosemont Clinic                                    | GIM/FM    | Urban   | 2                 |
| Group Health Olympia                                        | FM        | Urban   | 36                |
| La Clinica de la Raza                                       | FM        | Urban   | 16               |
| Martin’s Point-Evergreen Woods                              | GIM       | Rural   | 4                |
| Mayo Red Cedar                                             | FM        | Rural   | 13                |
| Medical Associates Clinic                                   | GIM       | Urban   | 115               |
| Mercy Clinics East                                          | FM        | Urban   | 7                 |
| Multnomah County Health Department                          | IM        | Urban   | 40                |
| Newport News Family Practice                                | FM        | Urban   | 5                 |
| Quincy, Office of the Future                                | FM        | Rural   | 2                 |
| Sebastopol Community Health Centers                         | FM        | Rural   | 8               |
| Southcentral Foundation                                     | FM        | Urban   | 115               |
| ThedaCare-Oshkosh                                          | FM        | Urban   | 5                 |
| University of Utah-Redstone                                 | IM        | Rural   | 5                 |
| West Los Angeles VA                                         | IM        | Urban   | 12               |
| Virtual visits                                              |           |         |                   |
| Allina-Cambridge                                            | FM/GIM    | Urban   |                   |
| North Shore Physicians Group                                | FM/GIM    | Urban   |                   |

FM = family medicine; GIM = general internal medicine; IM = internal medicine; VA = Veterans Affairs.

* Includes physicians, physician assistants, nurse practitioners.
el’s strengths and weaknesses, was composed for each site (a full report is available at http://www.abimfoundation.org).

SOLUTIONS TO COMMON PROBLEMS
During our site visits, we observed a number of solutions to problems commonly faced in primary care; these solutions include (1) proactive planned care, with previsit planning and previsit laboratory tests; (2) sharing clinical care among a team, with expanded rooming protocols, standing orders and panel management; (3) sharing clerical tasks with collaborative documentation (scribing), nonphysician order entry, and streamlined prescription management, (4) improving communication by verbal messaging and in-box management, and (5) improving team functioning through co-location, team meetings, and work flow mapping (Table 2). Below we organize our findings as solutions to common problems in primary care.

Reducing Work Through Previsit Planning and Preappointment Laboratory Tests
Primary care visits are often disorganized and rushed.

Solution
Many high-functioning sites have learned that previsit planning and previsit laboratory tests can reduce the total volume of work to be done, save time, and improve care.

Example At Mayo Red Cedar Medical Center patients have their laboratory tests done a few days before their appointments and are able to discuss results and engage in shared decision making at the time of the visit. This system eliminates an hour or more per day of post-appointment results reporting. David Eitrheim, MD, reported (e-mail, July 9, 2012):

Patients like to discuss the results of their lab work at the time of their office visit. I can’t imagine going back to the day when I used to send out letters to patients with results of HbA1c and lipid profiles and not use those results as an opportunity for motivational interviewing, goal setting and developing an action plan.

Adding Capacity by Sharing the Care Among the Team
In many practices, patients cannot reliably see their own primary care physician the same day a need arises. In addition, most patients are not receiving all recommended prevention and chronic illness care.23

Table 2. Problems and Innovations

| Problem                                                                 | Innovation                                                                 |
|------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Unplanned visits with overfull agendas                                 | Previsit planning                                                         |
| Inadequate support to meet the patient demand for care                 | Preappointment laboratory tests                                            |
|                                                                        | Sharing the care<sup>a</sup>                                               |
|                                                                        | Expanded nurse or medical assistant rooming protocol                      |
|                                                                        | Standing orders                                                           |
|                                                                        | Extended responsibility for health coaching, care coordination, and integrated behavioral health to nonphysician members of the team |
|                                                                        | Team responsibility for panel management                                  |
|                                                                        | Scribing                                                                  |
|                                                                        | Assistant order entry                                                     |
|                                                                        | In-box management                                                         |
|                                                                        | Verbal messaging                                                          |
|                                                                        | Improving team communication through co-location                          |
|                                                                        | Huddles                                                                  |
|                                                                        | Regular team meetings                                                     |
|                                                                        | Improving team functioning                                                 |
|                                                                        | Systems planning                                                          |
|                                                                        | Work flow mapping                                                         |

<sup>a</sup> These roles require 2- or 3-to-1 clinical support per physician.

Solution
Improving access and increasing adherence to clinical guidelines requires building additional capacity into the practice. Many sites accomplished capacity building by transforming the roles of medical assistants, licensed practical nurses, registered nurses, and health coaches so that they assume partial responsibility for elements of care.24,25 In addition, some practices have an extended care team of social workers, behavioralists, nutritionists, and pharmacists, usually working with several clinician–medical assistant teamlets.24,26

Example 1 At North Shore Physicians Group (NSPG) in the Boston area, the medical assistant’s role has been transformed. When a patient is taken to an examination room (rooming), the process has been expanded from 3 minutes to 8 minutes and now includes medication review, agenda setting, form completion, and closing care gaps. For example, the medical assistant reviews health-monitoring reminders, gives immunizations, and proactively books appointments for mammograms and DXA (dual-energy x-ray absorptiometry) scans for osteoporosis. A medical assistant training curriculum is available at http://www.safetynetmedicalhome.org. The role transformation for medical assistants is part of a larger team-care initiative at NSPG, which has resulted in a 14% increase in primary care physician satisfaction scores. “We knew our physicians were dissatisfied with the quality of the
interaction with the patient because of all the things they had to do in the exam room that were nonphysician work,” said Sharon Lucie, Vice President for Operations, during an interview (December 11, 2011). “Now providers are begging us to get them started in the new model.”

Example 2 Clinica Family Health Services near Denver, Colorado, has created standing orders empowering registered nurses to diagnose and treat simple problems without a physician’s involvement. These problems include streptococcal throat infections, conjunctivitis, ear infections, head lice, sexually transmitted diseases, uncomplicated urinary tract infections, and warfarin management.

Example 3 At Clinica Family Health Services, nonprofessional health coaches provide patient education and counseling to help patients with chronic conditions set goals and formulate action plans. Medical assistants sensing depression symptoms administer the 9-item Patient Health Questionnaire depression screen and then contact the team’s behaviorist.

Example 4 Group Health Cooperative (GHC) couples centralized population management with team-based panel management. Centrally, GHC sends birthday letters to patients reminding them of overdue preventive services. Medical assistants on clinical teams are responsible for outreach to patients who do not respond and address remaining care gaps during the rooming process.

We observed that team development must often overcome an anti–team culture. Institutional policies (only the doctor can perform order entry), regulatory constraints (only the physician can sign paperwork for hearing aid batteries, meals delivery, or durable medical equipment), technology limitations (electronic health record work flows are designed around physician data entry), and payment policies that only reimburse physician activity constrain teams in their efforts to share the care. An extended care team of a social worker, nutritionist, and pharmacist may be affordable only in practices with external funding or global budgeting.

Eliminating Time-Consuming Documentation Through In-Visit Scribing and Assistant Order Entry
Physicians across our study sites reported spending about 2 hours per day on visit note documentation, and some physicians reported spending up to an additional hour per day on computerized order entry.

Solution
Six sites have extended the concept of sharing the care by empowering nurses and/or medical assistants to become an integral part of the visit: scribing the note, entering orders, preparing the after-visit summary, and reinforcing the plan with the patient.

Example At the Cleveland Clinic Strongsville, primary care physicians work with 2 medical assistants or 1 medical assistant and 1 registered nurse. The nurse or medical assistant first completes an expanded rooming protocol, then returns with the physician to record notes while the physician talks with and examines the patient. After 1 year in the new model, average daily visits increased from 21 to 28, thereby improving access and continuity. Revenue was up 20% to 30%, which has exceeded the cost of the additional medical assistant or nurse. Quality metrics, as well as patient, staff, and physician satisfaction scores, improved.

Kevin Hopkins, MD, the family physician leading the innovation noted (in conversation, December 6, 2011):

The MAs and nurses are more fully engaged in patient care than they have ever been and they enjoy their work…. They have increased knowledge about medical care in general and about their individual patients in particular. I am far more satisfied. I leave work an hour earlier every day and have a very fulfilling relationship with my team…. We’re having fun.

Saving Time by Reengineering Prescription Renewal Work Out of the Practice
Managing calls, e-mails, and faxes regarding prescription renewals consumes many health care resources.

Solution
By separating prescription renewal from chronic illness appointment adherence, and by providing 12- to 15-month prescriptions for stable medications, practices can avoid repeating the same work multiple times throughout the year.

Example At Allina-Cambridge in the Minneapolis area, medications are renewed for a full year at the annual comprehensive care visit, thus avoiding unnecessary interval handling of stable prescriptions. For example, a 3-month supply with 4 refills covers the patient until the next annual visit. Prescriptions initiated at interval appointments will have refills remaining. These prescriptions are resynchronized with all other chronic prescriptions once a year. Amy Haupert, MD, explained (personal communication, July 10, 2012): “Two to 5 minutes spent refilling all medications for the upcoming year saves us time dealing with phone calls and refill requests later throughout the year.”

Reducing Unnecessary Physician Work Through In-box Management
Tasks previously entrusted to receptionists, pharmacists, nurses, and transcriptionists have been transferred to the physician with many electronic health record implementations.
Solution
In several practices the nurse or medical assistant filters all the electronic and paper information, passing on to the physician only that information which specifically requires a physician’s level of expertise. In addition, replacing asynchronous electronic messaging with verbal messaging reduces the volume of in-box messages.

Example Fairview Clinic in Minneapolis has decreased the in-box work from 90 minutes to only a few minutes per day for many physicians. All messages are first directed to the medical assistant or nurse, who filters out normal laboratory results, prescription renewals, or requests that can be managed by protocol, passing through to the physician only messages that require physician-level attention.

Whenever possible, electronic messaging is replaced by more time-efficient verbal messaging between nurse and physician. Dr Haupert of Allina (personal communication, November 15, 2011) commented that “communication throughout the day is crucial to efficiency. We can answer questions on the fly rather than waiting to get back to the computer and pinging messages back and forth.”

Improving Team Communication Through Co-location, Huddles, and Team Meetings
If nurses and medical assistants cannot quickly run a problem by the physician, the problem loops around the office via time-consuming asynchronous e-messaging, creating more work and delays for patients. In addition, the lack of meeting time precludes development of improved work flows.

Solution
Co-location can make minute-to-minute communication more efficient. Team meetings provide protected time to improve processes and strengthen trust and reliance among the team.

Example 1 In the team care model at NSPG the medical assistant and physician sit side-by-side in “flow stations.” One of the early adopters was an established physician with a large panel of patients (2,500) with highly complex conditions. Previously this physician took 2 to 3 hours of work home each night, with co-location that facilitates efficient verbal communication and the expanded role for medical assistants, he routinely leaves the office with all of his work completed.

Example 2 At the Cleveland Clinic, the physician and clinical staff meet weekly to review data and refine their work flows. Dr Hopkins explained (in conversation, December 6, 2011):

We set aside 1 hour every Friday morning to go over the week’s work, what worked well, what didn’t, what changes do we need to make. We do some education as to why we do microalbumins on diabetics, etc. Learning why we do certain things gains buy-in.

Improving Team Functioning Through Systems Planning and Work Flow Mapping
Medical care involves a large number of recurrent tasks: registration, rooming, ordering studies, making referrals, refilling prescriptions, informing patients of laboratory results, forms completion, etc. These work flows can be efficient, rapid, and promote patient safety, or they can be complex and fraught with hazards. Without careful planning, new work flows developed in response to changing regulations or technology can push much of the work onto the physician.

Solution
Adopting a systems approach to practice redesign can improve efficiency and reduce waste.

Example ThedaCare-Oshkosh in central Wisconsin saw its performance on clinical and operational metrics move from last to first place in its 22-clinic organization. The group attributes this to systematic work flow planning using Lean techniques, which include identification and elimination of waste through value stream mapping and process standardization.29 Clinic site director, Kathy Markofski, reported (in conversation, September 26, 2011), “The team maps out the work flow of a patient visit. We identify wait times, do a root cause analysis, develop countermeasures and then quickly reassess with data.”

DISCUSSION
The current practice model in primary care is unsustainable. We question why young people would devote 11 years preparing for a career during which they will spend a substantial portion of their work days, as well as much of their personal time at nights, on form-filling, box-ticking, and other clerical tasks that do not utilize their training. Likewise, we question whether patients benefit when their physicians spend most of their work effort on such tasks.30 Primary care physician burnout threatens the quality of patient care, access, and cost-containment within the US health care system.

We set out in search of joy in practice. What we found were pockets of professional satisfaction. Even at the best of practices, physicians are still often caught in what Chesluk has coined the “frantic bubble,” trying to manage an overwhelming burden of clerical work, conform to constraining regulations, and deal with cumbersome technology workarounds, all in a time-pressured environment. Our observations suggest that these 23 innovative sites are pointing the way to
a better model. No single practice has solved every issue; each practice still struggles to overcome its own unique set of constraints.

There were unifying themes among our sites. Practices that build stable, well-trained teams which work together every day and meet regularly to improve their work can create efficient work flows and rewarding practice environments. Standardized work flows with higher levels of clinical support personnel can make practices less chaotic, save time, and meet patients’ needs more quickly. Teamwork is facilitated by proximity of workstations and frequent forums for interaction. Thoughtful physical layout with co-location of staff and line of sight enhances communication. Face-to-face verbal communication is often more effective, efficient, and enjoyable than circulating asynchronous electronic messaging.

Despite these unifying themes, we found contrasting approaches to several common issues in primary care among our study sites, including the details of delegating responsibility, scheduling, and documentation.

**Sharing Responsibility Among Team Members**

Physicians can share the care with a team in 2 distinct ways. In the first model physicians are involved with every patient visit but entrust responsibility for many visit-based tasks (medication reconciliation, order entry, after-visit summary, visit note documentation, self-management support) to other team members. These practices prioritize access, continuity, and relationship with the same physician, maximally leveraging the skills of the physician. In the second model physicians perform most visit-based tasks, but they are involved with only a subset of patient visits, while directing the patient to other team members for discrete episodes of care: a pharmacist for hypertension or a nurse for anticoagulation. These practices prioritize continuity with the larger care team.

**Scheduling**

We observed 2 distinct approaches to scheduling in attempt to de-stress the physician’s workday. One approach, exemplified by GHC, decreases the number of visits per day and reduces physician panel size.\(^\text{32}\) Another approach, developed by Newport News, Allina, Cleveland Clinic, and Mayo Red Cedar Medical Center, increases capacity and access by directing clerical tasks away from the physician.

**Scribing and Team Order Entry as an Antidote to Waste**

The volume of work associated with record keeping and order entry has increased during the past decade with the introduction of electronic health records, quality-monitoring initiatives, and increasingly complex billing regulations. Tasks that took a few seconds in the pre–electronic health record world can take several minutes in the electronic world. Visit notes have become lengthy documents, formatted on a billing template, complicating rather than facilitating the cognitive work of finding key information. Scribing is a powerful tool to reduce the burden of record keeping and order entry and to free the physician to focus more fully on direct patient care and relationship building.

**FUTURE RESEARCH**

The observations described here could lead to a series of hypotheses for future research (Supplemental Appendix 3, at http://annfammed.org/content/11/3/272/suppl/DC1). For example, do physician burnout scores diminish when a practice initiates standing orders that empower team members to assume new responsibilities? Does patient and non-physician staff satisfaction change when such standing orders are instituted? To add context to such quantitative studies, physicians, nonphysician staff, and patients can be interviewed individually or in focus groups to gain greater understanding of the impact of team-empowering standing orders. Similar research questions can be asked about scribing and about each of the innovations listed in Table 2. Furthermore, although staff satisfaction and the patient experience fell outside the scope of the project, some managers and staff reported that professional satisfaction was increased for medical assistants and nurses with each of these innovations—another area for future study.

The core work of primary care remains meaningful and rewarding, but this work has been crowded out by increasingly complex regulatory, technological, and administrative requirements. Primary care physicians across the country now spend much of their time on large volumes of clerical work, including visit note documentation, order entry, prescription processing, and clearing the in-box. As a result, primary care physicians experience low levels of professional satisfaction\(^\text{3}\) and underutilize the training that society has invested in them. We believe a shift from a physician-centric model of work distribution and responsibility to a shared-care model, with a higher level of clinical support staff per physician and frequent forums for communication, can result in high-functioning teams, improved professional satisfaction, and greater joy in practice.

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