ANNALS OF FAMILY MEDICINE

Online Supplementary Material

Nutting PA, Crabtree BF, Stewart EE, et al. Effect of facilitation on practice outcomes in the National Demonstration Project model of the patient-centered medical home. *Ann Fam Med*. 2010;8(Suppl 1):S33-S44.

http://www.annfammed.org/cgi/content/full/8/Suppl_1/S33/DC1

Supplemental Appendix 1. National Demonstration Project Model Components

Access to Care and Information (7 components)

Same-day appointments: Practice maintains a process (eg, extended hours, predetermined number of open slots) that allows them to see every patient who calls for a same-day appointment and thereby do today's work today. Ideally, process will be fluid and constantly adjusted according to day of the week, season, staffing, etc. Note: patients who call for a same-day appointment may not always be seen by their personal physician that day, but in most cases, they *will* be seen.

Laboratory results highly accessible: Practice maintains process to quickly provide laboratory results, whether by telephone call, mail, e-mail, or some other means. Process includes steps to ensure smooth transition among return of laboratory results and placement in records, sign-off by physicians, delivery of laboratory results to patients, and documentation of delivery. As technology becomes more available and affordable, practices will ideally move to patient portals that allow patients to view their laboratory results online.

Online patient services: Practice offers online patient services on their Web site, for example, patient education links, online appointment scheduling, online bill pay, e-mail with the practice/physician. As technology becomes more affordable and available, practices will ideally move to patient portals that will allow all these services as well as patient access to their medical record and laboratory results.

e-Visits: Practice has the ability to e-mail patients through some or all of several methods:

- Staff can communicate with patient by e-mail, preferably encrypted
- Clinicians can communicate with patient by e-mail, preferably encrypted
- Physician can offer structured and HIPAA-compliant office visits by e-mail (depending on insurance participation, such visits may be reimbursable or self-pay)

Group visits: Practice offers group visits (DIGMAs or group visits focused on a single chronic condition) as a way to enhance patient care through peer support and education, as a way to increase access, or both.

After-hours access coverage: Practice has established plan for providing care to patients after hours so that when patients call, they will either receive the care they need over the phone or be directed to appropriate and available coverage—the ED being the last resort, for true emergencies.

Culturally sensitive care: The physical design, communication style, and culture of staff and practice environment are inclusive to patients of all ethnicities, abilities, ages, and economic statuses. *(not assessed)*

Care Management (6 components)

Population management: Practice has the ability, resources, and processes (with or without technology) to:

- Identify certain segments of their population or patient panel by demographics, disease, or prescription
- Plan interventions based on emerging population need or identified clinical issues

Wellness promotion: With the understanding that wellness is more than the absence of illness, the practice culture promotes wellness/healthy living through patient encounters, the interaction of staff and patients, and the practice presence in the community (eg, health fairs).

Disease prevention: Practice has the ability, resources, and processes (with or without technology) to coordinate screenings, establish prevention plans, and provide education based on patient's family history and current health status.

Patient engagement and education: At both the encounter and practice level, patients are offered opportunities to become more involved (eg, through group visits, a patient portal, motivational interviewing by physician).

Leveraging of automated technologies: The practice develops processes to use technologies in ways that enhance patient care and allow staff to work to their highest potential rather than automating inefficiencies (eg, uses automated follow-up telephone calls, registry functions, patient scheduling). *(not assessed)*

Care coordination: Practice serves as gateway to care by directing patients to appropriate resources in the community; practice has processes (with or without technology) to send, receive, and organize patient information within and beyond the practice. *(not assessed)*

Practice Services (5 components)

Comprehensive care for acute and chronic conditions: Practice has the ability and flexibility to anticipate a wide spectrum of patient needs and coordinate care appropriately; this capacity is created within the context of a longitudinal relationship and partnership with the patient.

Prevention screening and services: Practice has ability, processes, and resources to:

- Identify patients in need of evidence-based screening
- Provide or coordinate such screenings
- Communicate results back to patients

Surgical procedures: The practice offers as many in-house procedures (eg, punch biopsies, casting) as the market supports in order to decrease fragmentation of care and increase patient convenience. If offering such procedures is not justified as a result of cost, practice can coordinate referral and follow-up.

Ancillary therapeutic and support services: Practice has ability to offer or coordinate closely with:

- Services that are traditionally outside the scope of primary care but that often aid in a successful plan of patient care (eg, nutritional consultation, PT, home health)
- Services that are market responsive (eg, skin aesthetics)

Ancillary diagnostic services: Practice is market responsive with respect to needed, convenient diagnostic services. Practice can provide such services in house or maintain a system to easily coordinate with entities in close proximity (< 15 miles), including a plan to obtain diagnostic information and follow up with patient.

Continuity of Care (9 components)

Community-based services: Practice extends the team beyond the practice walls by establishing and maintaining relationships with community-based programs that provide complementary services for whole-person care (eg, Meals on Wheels, WIC, mental health centers).

Hospital care: Practice develops process to stay in the loop when patient enters hospital (eg, communication with hospitalist, smooth transfer of data, quick follow-up visit after discharge) *or* practice has ability to provide hospital care as required by market forces and geographic needs.

Behavioral health care: Practice addresses behavioral health issues at some level within the practice:

- Identifying lifestyle issues specific to patients (smoking cessation, weight loss, exercise) and offering education, guidance, and support
- Directing patients to community services with follow-up
- Addressing psychosocial concerns and using appropriate screenings during clinical encounters
- Facilitating access to behavioral specialist (eg, having specialist on site or connected to practice)

Maternity care: Practice develops processes to stay in the loop when patient receives outside maternity care (eg, communication with obstetrics-gynecology, smooth transfer of data, quick follow-up visit after delivery*) or* practice has ability to provide maternity care as required by market forces and geographic need, affordability based on the malpractice climate, or both.

Physical therapy: Practice develops working relationship with area PT services to include a smooth referral/follow-up process; PTs may become part of the practice team by providing patient education through group visits, materials, etc. (*not assessed)*

Case management: Practice has a designated process in place to track complex patients with multiple comorbidities by facilitating the interface of the care they receive both inside and outside the practice, thus preventing patients from falling through the cracks.

Pharmacy: Practice develops working relationship with area pharmacies as a way to extend the team (eg, pharmacists who assist in patient education and follow-up with physician). Practice develops and maintains processes to assist in coordination of prescriptions and refills. (*not assessed)*

Specialist care: Practice maintains a referral and follow-up process with specialists to avoid fragmentation and ensure organization of data and coordination of care; physicians actively seek ways to develop working relationships with specialists. (*not assessed)*

Collaborative relationships: Practice views entire health service community as part of the full spectrum of care and intentionally seeks ways to complement patient care within and outside the practice:

- Establishes and maintains relationships with other health providers
- Has processes in place for data follow-up, communication, and feedback (*not assessed)*

Practice Management (6 components)

Disciplined financial management: Leadership demonstrates a clear grasp of finances, including a regular review of financial data; the ability to interpret, respond to, and anticipate financial data; and an informed view of the practice as a service-based, revenue-generating business.

Cost-benefit decision making: Leadership demonstrates an understanding of cost-benefit analysis and makes relevant practice decisions (eg, regarding equipment purchases, overhead, staffing, changes in patient volume) accordingly.

Revenue enhancement: Practice examines and implements opportunities to increase revenue through management opportunities (eg, increased copay collection, reduced no-show rate, review of denial rates).

Personnel/HR management: Practice maintains staff-physician ratio appropriate to patient volume, as well as appropriate HR policies and procedures (job descriptions; hiring, firing, performance appraisal; cross-training and continuing education).

Optimized office design: Practice optimizes physical design of office in order to improve:

- Aesthetics (eg, new paint job)
- Staff communication (eg, placement of offices, workstations)
- Patient flow (eg, computer kiosks for patients)
- Work flow (eg, location of printer)
- Morale

Optimized coding and billing: Leadership and billing develop strategies to increase collections and streamline processes. Clinicians consider and use all possible sources (EMR, billing staff, consultant) in order to optimize coding. (*not assessed)*

Quality and Safety (8 components)

Medication management: Practice takes proactive approach to maximize safety and education of patients:

- Adopting the practice of e-prescribing as the technology becomes affordable and available
- If available, having an EMR feature to cross-check for medication interaction
- Educating patients, including education about medication adverse affects, health outcomes, realistic expectations, self-management, and barriers to compliance

Patient satisfaction feedback: Practice regularly solicits feedback from patients (eg, by paper questionnaires, electronically, through survey by outside company) and has a process in place for review of feedback and implementation of agreed changes.

Clinical outcomes analysis: Practice measures their quality of care through deliberate collection of specific outcomes by any variety of methods: EMR function, chart reviews, additional IT product (eg, CINA, MDdatacor), participation in PBRN, P4P, PVRP, etc. Practice has process in place to review the data and make changes in how care is delivered.

Quality improvement: Practice participates in either internally or externally initiated QI projects, using specific processes (eg, PDSA cycles or practice protocols) to target specific outcomes (eg, increasing mammography rates). Process is integrated into practice as a method of ongoing evaluation.

Practice-based team care: Members of the practice work as a team to care for the patient, from front desk to MA to physician. Work flow is developed and consistently fine-tuned based on input, skill level, education, and motivation of team members.

Evidence-based practices: The practice demonstrates a consistent use of, and attention to, evidence-based guidelines within individual patient encounters and its approach to population management (eg, use of evidence-based point-of-care reminders, education on viruses as they apply to antibiotic use). (*not assessed)*

Risk management: Practice reduces risk by implementing processes to limit liability, decrease adverse events, encourage reporting and correction of errors, and increase staff and patient safety. (*not assessed)*

Regulatory compliance: Practice follows regulatory guidelines in terms of laboratory regulations, HR regulations, monitoring of controlled substances, etcetera. (*not assessed)*

Health Information Technology (7 components)

Electronic medical record: Practice strives to use EMR at maximum functionality: promotes standardized use among clinicians when appropriate; gives careful consideration to the EMR as part of the work-flow process, and adjusts work patterns accordingly; EMR enhances rather than detracts from patient care.

Electronic prescribing: When technology is affordable and available, practice eliminates handwritten prescriptions through 1 or more of the following: unilateral electronic transmission of prescription through Zeta fax connected to EMR, pharmacy receives prescription through fax; bilateral electronic transmission of prescription through e-prescription tool (eg, SureScripts), pharmacy receives prescription electronically; prescription is printed out from EMR at patient's request.

Population management/registry: Either the EMR or an additional IT feature (CINA, MDdatacor, etc) gives practice the ability to view their patient population and generate reports based on evidence-based guidelines and patient compliance rates.
Practice Web site: Practice maintains functioning Web site; some practices may have interactive patient portals.
Interactive patient portal: Portal allows patients to schedule appointments, pay bills, and communicate with practice online; other features include access to parts of medical record, online registration, and Instant Medical History.
Evidence-based decision support: EMR provides evidence-based decision support at point of care, integrating information from outside providers and sources; clinicians and clinical team may establish standing orders based on support. (*not assessed)*
Electronic orders and reporting: When technology is affordable and available, the practice documents and transmits physician orders electronically. (*not assessed)*

Practice-Based Care Teams (7 components)

Provider leadership: Strong, facilitative leadership system is in place with either lead physician or lead physician and key staff/other physicians, clinicians. Strong leadership includes an ability to communicate clearly, deal with conflicts, make decisions, and inspire change.
Shared mission and vision: Practicewide understanding and commitment to practice mission and vision; front and back office understand each other's role in a successful patient encounter.
Effective communication: Practice uses rich and lean communication in appropriate channels and context; conflict is dealt with in constructive and healthy manner; diverse opinions and ideas are welcome; talk is respectful.
Task designation by skill set: Practice members are trained and encouraged to work to their highest capacity.
Patient participation: Practice invites patients to be active participants in the practice as an organization; patients are invested stakeholders (eg, through patient surveys, invitation of patients to practice meetings or advisory boards). (*not assessed)*
Nurse practitioners and physician assistants: NPs and PAs are integrated and empowered players on the practice team with mutual respect between physicians and NPs and PAs. (*not assessed)*
Family involvement options: When appropriate, the practice is open to the involvement of a patient's family in medical decision making and cognizant of influences family members have on the health of their patients. (*not assessed)*

Note: Of the 55 components, we were unable to measure 16 (indicated by *not assessed*).
DIGMA = drop-in group medical appointment; ED = emergency department; EMR = electronic medical record; HIPAA = Health Insurance Portability and Accountability Act; HR = human resources; IT = information technology; MA = medical assistant; NDP = National Demonstration Project; NP = nurse practitioner; PA = physician assistant; PBRN = practice-based research network; P4P = pay for performance; PDSA = Plan, Do, Study, Act; PT = physical therapy/physical therapist; PVRP = Physician Voluntary Reporting Program; QI = quality improvement; WIC = Women, Infants, and Children.