PRIMARY CARE TRACK TOOLKIT

Starting a PC Program | Scheduling | Chronic Disease Management | LARC | Home Visit | Advocacy | Quality Improvement | Opioid Education | Chronic Pain Management

Produced by the APDIM
Primary Care Forum
Welcome to the primary care toolkit! Whether you are thinking of starting a primary care track or already are involved in a primary care residency program, this toolkit created by members of the APDIM Primary Care Forum offers resources to improve your program. The aim of this toolkit is to reduce your workload and let you learn from colleagues across the nation. Our hope is to update this toolkit annually, growing our curricular offerings over time.

The toolkit is broken up in to two sections.

For those who are curious to learn more about primary care tracks, Section 1 offers an introduction on how a primary care track differs from a categorical track and a nuts and bolts guide to starting a primary care track at your institution.

Whether you already have a primary care track or are looking to start one, you will find interesting curricula and creative scheduling ideas in Section 2. In this first edition of the primary care toolkit, you will find a discussion of various primary care training sites and creative scheduling ideas. We have also provided curricula on chronic disease management, reversible long acting contraception, home visits, advocacy and quality improvement. We provide an introduction to opioid education used at a community hospital and provide a detailed chronic pain management curriculum.

We hope you find this guide helpful and would love to hear your feedback on how to make this even better moving forward. For questions or comments, feel free to reach out at academicaffairs@im.org.

Sincerely,
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How Does a Primary Care Track Differ from a Categorical Track?

Karen Chacko, MD & Halle Sobel, MD

Primary Care internal medicine residency programs overlap with categorical residencies, but can and should be distinct in several ways. It is important to separate out key features of the primary care residency program in order to: define the program and the specialized training within it; to make it transparent to all that this is unique training for residents entering into primary care fields; to serve as a guidepost for other programs who are looking to develop primary care programs; and to foster enthusiasm among the residents and faculty in developing and maintaining careers in primary care.

Rotational Experiences
There are several unique rotations and/or elective experiences that should be integrated into primary care tracks:

Women’s Health
Primary care residents should be trained on the routine care of the healthy female patient, contraceptive management, preconception counseling, breast pain, evaluation of breast masses, menopause, vaginitis, abnormal uterine bleeding, dysmenorrhea and female sexual dysfunction. (ref MSKAP). This experience may take place through didactics, as well as experiences in the primary care continuity clinic and/or in women’s health clinics. Procedural training for nexplanon and IUD insertion/removal should be encouraged in the track.

Musculoskeletal Medicine
Musculoskeletal conditions are commonly seen in primary care practices and experiences in orthopedics, physical medicine and rehabilitation, sports medicine, rheumatology, podiatry and physical therapy are key components to the educational curriculum. Residents may be trained in procedural techniques including joint injections or aspirations in simulation centers, their own continuity clinics and/or specialty clinics.

Dermatology
Given the multitude of skin complaints which are first seen by the primary care physician, trainees should develop comfort in managing and knowing when to refer acute skin conditions such as rashes as well as benign and malignant skin conditions. Procedures including cryotherapy, skin biopsies, simple incision and drainage procedures, wound care and skin tag removal should be a part of a comprehensive primary care training program. This may be taught by internal medicine, family medicine or dermatology faculty. Some training programs may have procedure clinics for their residents to rotate through.
Substance Abuse and Addiction Medicine
Given the extent of substance abuse in the U.S., many residency programs are training residents in the management of patients on Suboxone. Although residents cannot prescribe Suboxone, they can still participate in the waiver program required to obtain a Suboxone license and can prescribe upon graduation without repeating the waiver program. A rotation with an addiction specialist can be a valuable experience for a primary care track resident.

Mental Health
Due to the shortage of mental health clinicians, primary care physicians are on the forefront of diagnosing and treatment many mental health conditions. It is crucial to train residents in the management of depression, anxiety, attention deficient hyperactivity disorder (ADHD), post-traumatic stress disorder (PTSD) as well as the ability to know how to triage a suicidal patient.

Other
In the authors’ experience, many primary care tracks also offer flexibility to the residents to help choose rotational experiences which will help in their career and to help fill knowledge gaps. This may include additional experiences such as office ENT, internal medicine private practices, community health centers, outpatient cardiology, HIV clinic, travel clinic, telephone medicine, home visits and certification in treadmill testing. These experiences may vary regionally by what resources are available at the sponsoring institution.

The Continuity Clinic
The clinic experience is the cornerstone of training for primary care residents. The environment should be supportive with faculty and staff to foster an excellent clinical and educational experience. This experience is often one of the few with a robust continuity experience as residents learn to care for a panel of patients over a 2-3-year period. Many programs attempt to place primary care residents exclusively into patient centered medical homes (PCMH), or at the very least those that function like a highly skilled medical home. In the VA clinics, this may take the form of a PACT team (patient aligned care team). Various models are used for clinic, but when thinking about experiences for primary care residents, it is advisable to have access to social workers, care managers, and inter-professional teams so that residents participate in inter-professional care. It is desirable to prioritize primary care residents to also experience clinic sites that have integrated mental health, or that have ready access to mental health professionals and services. Furthermore, many primary care residents enjoy access to underserved patient populations so taking that into consideration when assigning clinic sites for these residents is important.
**Curriculum**
The primary care curriculum is discussed elsewhere in this document in detail, but in general it would be important to have a dedicated curriculum that is separate and distinct for the primary care residents. Ideally, you would be able to gather your primary care residents in small groups (often by year of training, but also possible by cohorts or clinic weeks if necessary) to deliver the curriculum. The curriculum should cover components that are not traditionally taught to all internal medicine residents with consideration for the following topics: practice management, population health and health policy, ambulatory transitions (e.g. inter-visit care, post discharge clinic, etc.), preventive medicine, evidence-based practice, meaningful care of the geriatric patient, cross-cultural/patient-centered communication, team leadership, behavioral medicine/mental health, telephone medicine, pain management and addiction medicine.

**Community Involvement**
Establishing tangible ties for the primary care residents to interact with and contribute to the community is one of the hallmark features of successful primary care programs. Examples of tangible ties could be community outreach, participation in health fairs or free clinics, service projects within the community, educational outreach, visits to local churches/nursing homes/organizations.

**Transition to Practice**
As primary care residents become ready to transition to an outpatient practice, it is important to cover additional topics such as coding, billing, documentation requirements for special visits such as Medicare wellness visits and transitions of care visits as well as how an efficient office staff interfaces with the day-to-day workflow of an efficient physician. Residents may also gain experience through supervision in an after-hours call rotation and weekend acute clinics.

**Conclusion**
Primary Care internal medicine programs should have rigorous clinical training that prepares them for practice in the variety of fields that encompass general internal medicine. Distinct offerings for clinical rotations, unique curriculum, highly functional and energized continuity clinics, and an emphasis on ties to the community are some of the defining features for successful training programs. Each primary care program should take into account their local faculty expertise, unique clinical settings, and surrounding community as they design these features.
Logistics of Establishing a New Internal Medicine- Primary Care Program
Marc Shalaby, MD, Stacy M. Higgins, MD, Jason Ojeda, MD &
Paul O’Rourke, MD, MPH

Well delivered primary care (PC) is associated with improved health quality as well as lower health costs.\(^1\)\(^-\)\(^3\) However, it is projected that an additional 33,000 practicing PC physicians are needed to accommodate an expanding, aging population by 2035.\(^4\) Such an expansion will require a major investment in the pipeline of PC clinicians to lead population management initiatives, engage in team-based care, slow the growth of rising health care costs, and drive quality of care.

In response, there has been a refocus at the national, state, and local levels to grow the number of trainees in PC programs.\(^5\) But even with desire and funding, the logistics of starting a PC track/program can be overwhelming. This piece is designed to give a general outline of issues to be considered as one tries to create unique and attractive training pathways to better prepare residents for ambulatory practice and give them the skills they need to navigate and excel in the future.

**Building a Coalition**

As you build your coalition, begin by assessing the readiness for change in your program, department, and institution. You can illustrate that a PC track/program is necessary by aligning the work of building a PC program/track with current institutional needs and priorities. There are obvious educational stakeholders with whom you can quickly align—program directors, medical school leaders and educators, general medicine division chiefs, department chairs, and the designated institutional officer. Most of these individuals should recognize the educational need to provide a balanced PC training program that will offer a more competitive recruiting strategy for talented applicants. In addition, division chiefs and chairs may have a vested interest in retaining PC graduates within the institution to help support the PC mission and subspecialty referral base. This need to “build the PC pipeline” will also resonate well with accountable care organization leadership, the executive c-suite, quality and safety leadership, and community clinics. A case could also be made that local payers would be interested in increasing the number of skilled, “practice-ready” PC physicians.

In the current climate, it is likely that every institution has a growing PC workforce as part of its long-range strategic plan. Local and regional competition for qualified and talented providers will be fierce given the current and predicted shortages of PC providers. Institutions that can “recruit from within” may fare better than those institutions who must recruit outside.

**Funding**

If you are adding PC slots on top of your current complement of residents, then additional funding for resident salaries and benefits is required. This expansion is predicated on the requirement that the internal medicine residency program does not exceed its approved size as determined by the Accreditation Council for Graduate Medical Education (ACGME). If the
program wishes to add PC positions to its current complement, it must justify to the ACGME the educational need and the capacity to do so. This is not a consideration when the PC slots are carved out of an existing categorical residency program. In addition, the director of the new PC program will need time and salary support to build, grow, and maintain the program. If there are core faculty members who will work alongside the director in curriculum development and delivery, funding to support their time is also necessary. Administrative support will also be required for residency management and operations. If an institution is operating below their Centers for Medicare and Medicaid Services (CMS) cap, it can garner additional funding merely by expanding the number of residency positions offered. This would allow direct funding to support the new PC positions. If an institution is already at or above their CMS allotment, it would either need to reallocate the current institutional trainee complement to allow for additional PC slots or directly subsidize the cost of expanding GME positions by creating “over the cap” positions.

In addition to CMS, there are several other funding sources for PC training programs. For 50 years, Title VII of the Public Health Service Act has provided grants to support PC clinician training, as well as curricular and faculty development. Administered by Health Resources and Service Administration’s Bureau of Health Professions, this funding is available to graduate medical education (GME) programs in family medicine, pediatrics, general internal medicine, geriatrics and physician assistants’ programs. Priorities are currently focused on supporting PC educational programs that promote interprofessional education, meeting the needs of a diverse patient population, and increasing the diversity of the workforce. Grant funding can be used to support faculty salaries, resident recruitment activities, travel for residents in line with grant aims, and other activities that will promote the grant’s objectives. Applying for Title VII funding is a competitive process, and over the last 10 years, Congress has cut the total dollars allotted to the program. Calls for applications generally come out in the fall with deadlines toward the end of the calendar year.

The Veterans Access, Choice and Accountability ACT (VACAA) GME expansion provides financial support to train more residents in PC, ideally in high need geographic areas. The goal of this funding is to add up to 1,500 new VA GME physician residency positions over five years in partnership with established academic affiliates. Applications for VACAA funding to support resident stipends are due in the spring for the following academic year. To address individual state predicted physician shortages, some states provide funding directly to community hospitals to start or expand PC training programs, particularly in rural areas. For example, in Georgia, the state made funding available to hospitals without established GME programs to expand new training slots focusing on PC programs and general surgery, particularly in rural parts of the state. This source of revenue is particularly of interest for new PC training programs being initiated in affiliation with a community hospital without an academic or VA partner.

**Primary Care Track or Program**

The distinction between a PC “track” and a PC “program” can be subtle, but the latter reflects a larger number of residents, a more distinct curriculum, and a higher degree of
upheaval to create it. Tracks have no specific ACGME or matching implications and are often the easiest way of starting a PC endeavor. They can be led by an associate program director, a member of the core faculty, or the director of the continuity clinic site. We feel that ideally, a 0.50 Full Time Equivalent (FTE) is required to build a program/track, but at least 0.35 FTE is essential. Residents may elect to join a PC track after matching, or at any point during their residency. In a track, the PC-specific curriculum is often built around the same scheduling template as the core program. Inpatient rotations and curricula are generally the same as the categorical program, although there may be fewer number of inpatient rotations. The PC curriculum generally includes more time in continuity clinic and other ambulatory venues. Tracks may choose to add additional clinic blocks to the schedule and increase time in clinic without building an entirely different schedule for the PC residents.

Primary care programs tend to be larger and have a more distinct clinical curriculum from the categorical program. Given the need for consistent numbers of PC residents for curriculum planning and clinical education, many PC programs have chosen to have a separate National Resident Matching Program (NRMP) match number. This allows some distinction from the categorical or “core” program. It also means trainees are committing to a PC program when they submit their rank list (although most have the flexibility to allow transfer into the program after match). A separate match number can also aid in the recruitment of applicants with particularly high interest in PC who may be unwilling to match into a residency program if their acceptance into the PC track is not guaranteed. There are a handful of programs that are entirely PC programs with no associated categorical program. They have their own distinct IM primary care NRMP code.11

**Structure of Ambulatory Time**

As part of any PC program, additional time in ambulatory training for the PC residents is necessary. How this ambulatory time will be distributed over residency will depend on the environment of the core program and the institution. Ambulatory time can be garnered from subspecialty elective time, previously scheduled ambulatory blocks, or from inpatient rotations.

If carving out a PC track from a core program, the size of the track and the amount of ambulatory time may be limited by the “staffing needs” on the inpatient services. If there is an overabundance of residents, the PC residents can be removed from inpatient service time relatively easily, although this will shift some additional inpatient duties to residents in the categorical program. If inpatient scheduling is tight, removing a significant number of PC residents from the pool may necessitate decreasing the number of services covered or restructuring of the services to allow for less resident coverage. Either way, this will create an imbalance of inpatient responsibilities between categorical and PC residents. This may be the first time an imbalance in work distribution amongst residents is perceived, so one must message this well to all residents. Recognizing and acknowledging this prior to any change is critical. Establishing the core mission and objectives of the PC track will guide the rationale for differences in training exposure for the PC residents. If one is expanding the residency by
adding PC residents, the “staffing needs” of the inpatient services are less of a problem as any additional residents will add scheduling flexibility to the whole program. X+Y scheduling models for PC programs may have advantages over traditional models. Such models can provide extended and protected time in ambulatory settings and allow for more consistent content delivery of didactic/small group curricula. By their nature, X+Y models decrease the conflict of simultaneously caring for patients in the inpatient and ambulatory settings. Furthermore, the model allows for more consistent resident scheduling in the clinics and may allow residents to return to their continuity sites at regular intervals. Importantly, recurrent and consistent immersion experiences in ambulatory care can build a culture of PC and create camaraderie among PC residents, office staff, and faculty. Such scheduling can improve learner/faculty continuity and allow for more effective skill development, observation, and feedback. However, these stated advantages are balanced by an increase in the complexity of scheduling and challenges of outpatient care when residents are not in their clinic. These challenges are not unique to X+Y models but do require some forethought and coverage strategies to insure continuity of care for patients is not negatively impacted.

Primary care programs (as opposed to tracks), given their larger size, can have a different scheduling template than the categorical program. For categorical programs employing X+Y scheduling models, the PC program can function in the same model with additional ambulatory time taken from the “X” blocks. Alternatively, a number of programs have been successful in having the categorical X+Y program interwoven with a different PC X+Y model. For example, at the University of Pennsylvania, the categorical 6+2 scheduling model is meshed with the PC 4+4 model. Furthermore, X+Y scheduling can be employed for the PC program even when the categorical program maintains traditional scheduling, although schedules made up for 13 four-week blocks are easier to mesh than those that are based on the calendar month.

Continuity Clinic
Continuity clinic is the cornerstone of any PC program. Ideally, immersion blocks should be utilized to allow for focused practice in the ambulatory training environment. This can occur as consistent recurring blocks of ambulatory time as in an X+Y model or a series of immersion ambulatory blocks in a traditional model. If immersion blocks are not possible, any additional clinic time is beneficial. There is no ideal number of clinic sessions for competence, but PC programs ideally should aim to exceed the current standards of 130 clinic sessions over three years. Numbers of patients scheduled per session should reflect local trends and capacities based on patient population, preceptor capacity, no-show rates, and the clinical environment. Capacity in the clinic may be the rate limiting step in the size of a PC program. If the PC residents’ continuity clinic site is in the same physical space as the categorical residents, and PC residents will have more clinic sessions there, it is important to determine if there is capacity to do this (i.e. enough clinical space, clinic staffing, and faculty preceptors). If the clinic site is already at capacity, one should consider adding or restructuring a new clinical site specific to the PC residents.
A separate clinical space may allow for the opportunity to designate certain faculty as “PC core faculty.” A limited number of dedicated faculty provides an opportunity for enhanced faculty development which can result in more consistency in teaching skills, precepting styles, and supervision. A PC clinic environment staffed with talented and dedicated faculty provides the ideal setting for frequent direct observations of residents, real-time clinical coaching, more thorough and effective evaluations of resident milestones, and would be an ideal venue to improve on specific skills in need of focused practice. A separate clinical site may also allow for more manageable initiatives in quality improvement, patient safety, and population health. Finally, housing PC residents together as a group in a single continuity clinic site allows the building of camaraderie amongst the residents, models a group practice, builds mentoring relationships with core faculty, and creates a supportive environment where a career in PC is not seen as an unusual choice of few, but the norm chosen by the majority. Separate physical clinical space for the PC residents is by no means a necessity, and programs who are not in a position to provide this must look for creative ways to enhance the PC experience/culture in clinic so that it is not merely more time in the categorical clinic.

Second Site Continuity Clinic Experiences
Primary care tracks/programs may also consider having the residents participate in “second site” continuity clinics. These are alternative ambulatory sites through which a PC resident rotates on a continual basis over 1-3 years and may involve a patient population in which the resident has a particular interest. Experiences could include, but are not limited to, community health centers, outpatient HIV care, women’s health, prison health, Latino health, refugee care, LGBTQ care, homeless care, and private practice. In addition to providing excellent training venues for residents, working in such clinics allows residents to provide direct clinical service to the community and provides an opportunity for these clinics to recruit new graduates. These advantages may be an effective negotiating strategy when such relationships are entertained. These second site clinics also provide a unique experience designed specifically for the PC residents, thus increasing uniqueness and desirability of the track/program.

Other Clinical Experiences
In addition to continuity clinic, other ambulatory clinical experiences are vital to a resident’s development. Ideally, all residents should have a core ambulatory clinical curriculum and opportunity for additional and elective ambulatory training. These might include ambulatory rotations through both internal medicine specialties as well as non-internal medicine specialties such as dermatology, ophthalmology, musculoskeletal medicine, and neurology, to name a few. Special clinical experiences, such as home visits, may also be valuable learning opportunities for PC residents.

Inpatient Clinical Experience
Primary care programs or tracks may choose to have their residents’ inpatient experience look very similar to, or very different from, their categorical colleagues. The congruity between the
PC and categorical inpatient experience depends on the culture of both programs and the institution. Some programs go to great lengths to assure almost identical inpatient experiences for all residents. There are a number of reasons for this including wanting to produce highly functional general internists who may choose to enter PC, hospitalist medicine, or specialty fields. This may be important as some PC-bound residents may change their minds during residency. There may also be a concern that PC residents participating in a less rigorous inpatient clinical curriculum may be perceived as less competent by the residents and faculty in the categorical program.

Alternatively, depending on the setting, a program may feel that the inpatient experience should be different for PC residents and may advocate for changes like less intensive care unit time, less subspecialty time, and more focus on general medical rotations. The latter may enhance experience with transitions and coordination of care with the ambulatory setting, which is a valuable focus for PC-bound residents. If one’s program has multiple inpatient clinical sites, one may choose to focus the inpatient experience for the PC residents at a different site than the categorical residents - perhaps a site with more of a “community hospital” feel. The right balance of inpatient experiences would allow PC residents to be better prepared for outpatient medicine without limiting their preparedness for inpatient and/or subspecialty careers. This can be accomplished especially if you are able to remove some of the redundancy in clinical training that can occur as a consequence of institutional service needs.

**Curricular Content**

In addition to clinical training, every PC program should have a robust educational curriculum. The cadre of topics can be delivered in didactic fashion, small group interactive seminars, resident-led endeavors, or in learning collaboratives with other programs. In addition to standard ambulatory medicine topics (e.g. hypertension, diabetes, screening guidelines), seminars provide an ideal venue for hands on physical exam education and procedural skill development. Topics such as communication skills, narrative medicine, wellness, as well as career and financial planning can complement the clinical curricula. By covering topics such as global health, medical education, local community resources, public health, health policy, health services research, quality and safety, population health, and mental health, the breadth is expanded. Supplemental content may also allow for novel curricula in travel medicine, telemedicine, inter-visit care, billing and compliance and even electronic health record optimization. This list of educational opportunities provided is not meant to be exhaustive, but rather illustrative of what can be accomplished. Small group seminars may also provide an opportunity for community building, camaraderie, and culture building.

**Primary Care Culture**

In addition to providing a superb learning and patient care environment for PC residents, a major goal of the program should be creating a special community and culture around PC. Providing unique, interesting, and meaningful clinical venues and classroom teaching can make the program desirable and perhaps preferable to the ambulatory training provided by the
categorical program. A small, dedicated faculty has the potential to provide clinical coaching and mentorship to PC residents that may not be possible in the larger program. In addition, exposure to topics vital to the future of PC (e.g. population health, quality and safety) will help PC residents feel that they are on the cutting edge of medical education and are prepared for the future of medicine.

**Conclusion**

The expansion and aging of the population necessitate training more primary care physicians to serve the needs of our country. Internal Medicine-Primary Care programs are well positioned to fill this gap by creating a workforce that is facile in the concepts of population health, interprofessional team-based care, transitions of care, and quality and value-based care. In this piece, we have outlined a template for steps in creating a successful primary care track/program from scratch. Ensuring the support of key stakeholders within GME, the C-suite, and the medical school will facilitate and drive the mission. Securing funding for new resident positions as well as support of faculty intimately involved in its formation and sustenance allows a program to move forward. Designing the interplay between ambulatory and inpatient time, the structure and location of continuity clinic, and the curricular content will allow the culture of the program to succeed and blossom.
REFERENCES

Exposure to Varied Primary Care Experiences
Rebecca Andrews, MS, MD & Jillian Goldsmith

Within the University of Connecticut’s Internal Medicine Residency are two longitudinal primary care tracks (Office-Based Medicine and Primary Care Residency Expansion). Most residency programs schedule their residents’ continuity clinic in a teaching clinic where the attending faculty may or may not have their own practice. Patient populations are often not representative of a true primary care practice panel; rather, resident patient panels typically have a higher population of patients with mental health, socio-economic, and health literacy challenges, among others.

Ambulatory blocks for the residents typically consist of a four to six-week experience with morning clinic in the location of their continuity clinic (one of four healthcare organizations) and afternoon specialty clinics that provide experiences in core medicine rotations such as gastroenterology and cardiology. Residents spend all three years attending the same patient panel at the same continuity site and do not receive exposure to the real-life practice settings they will encounter after graduation.

The primary care track residents have experiences in multiple settings to rectify the lack of familiarity to practice choices. It also alleviates the sensation that “only residents” see challenging patients. The primary care tracks offer the following experiences:

1. **Community Health Center**
   Community health centers are an ideal place for residents to learn about care coordination, pharmacy assistance, multi-disciplinary care, advance access scheduling, and embedded mental health providers. These centers are a safety-net for patient care throughout the country and some have partnered with academic health centers already making it easy to arrange such an experience. For those CHCs not affiliated with an academic health center already, preceptor training and a balance of productivity and teaching need to be arranged before beginning.

2. **Private Practice – Suburban**
   Seeing primary care performed by a private practice physician offers the opportunity for residents to see a different practice model from a financial, schedule, and hired support staff perspective. Ambulatory rotations in the primary care tracks utilize offices located in local suburban towns with established patient panels. Residents usually begin by shadowing until they understand the workflow of the office and then see patients in a traditional preceptor model. The attendings are supplied with a PowerPoint about resident education and clinical precepting, with individual mentoring as needed. Resident feedback about sites is essential to cultivating a resource group of appropriate sites.
3. **Private Practice – Urban**
   Similar to the suburban private practice, an urban private practice has the opportunity to teach residents about staffing and financial models. The urban practices utilized belong to larger Accountable Care Organizations (ACOs), allowing residents to learn about the true financial impact of quality assessment. Another benefit to this experience is the understanding that develops from seeing the diversity of an attending’s patient population.

4. **Academic Primary Care Practice**
   Residents rotate through the academic primary care practice as well. They work with their faculty seeing patients in their practice and experience the clinical side of a medical educator’s job. During this experience, residents are taught the “business of medicine” including insurance exchanges, health care law, and billing.

5. **Department of Corrections (DOC)**
   Although the paperwork and security present a challenge, rotations with the DOC are rewarding for residents. The opportunity to practice primary care and treat HIV, hepatitis C, minor surgical procedures, and the traditional chief complaints is unique. Additionally, the residents see a cost-contained system that has the ability to bargain for medication prices through contracts similar to the VA, thus experiencing an approach similar to healthcare systems in Canada and the United Kingdom.
Creative Scheduling
Rebecca Andrews, MS, MD & Jillian Goldsmith

Overview
The University of Connecticut’s Internal Medicine Residency has two longitudinal primary care tracks within the program (Office-Based Medicine and Primary Care Residency Expansion) that use creative scheduling to expose residents to a more realistic primary care experience.

The IM Residency is limited to ambulatory blocks and the traditional half-day continuity clinic for exposure and learning outpatient medicine. These ambulatory blocks for all residents typically consist of a four-to-six week experience, with morning clinic in the location of their continuity clinic (one of four healthcare organizations) and afternoon specialty clinics that provide experiences in core medicine rotations such as gastroenterology and cardiology. The four health systems are varied (academic, Veterans Administration, Accountable Care Organizations (ACOs)) however; the residents are only exposed to primary care at the site of their continuity clinic. Our program is currently exploring options for a less frequent “all day” clinic on call block rotations as a means to limit the tension between in- and out-patient duties.

Residents interested in primary care have a disjointed experience and not all specialties are committed to teaching from a perspective of a resident heading into primary care. Therefore, we created several options for residents. Both of these options had one lead director who also served as a mentor and/or advisor. The Office-Based Medicine (OBM) track residents “opt in” when filling out schedule requests in January of their PGY-1 year. This track has morning ambulatory block clinics scheduled with a dedicated team of primary care faculty in order to expose residents to skilled, enthusiastic preceptors. The exposure to attendings in primary care who “walk the walk” elevates the stature of primary care as a career choice. Electives were also changed to be outpatient-based. This allows the residents to see the full course of a disease from a specialty perspective, increase their skills in chronic disease management, and learn appropriate referral mechanisms (timing, coordination of recommendations, etc).

Lastly, afternoon specialty time was comprised of experiences deemed important for excelling in the practice of primary care (sports medicine, geriatrics, hypertension, ophthalmology, urology, physical therapy, and ENT).

The overwhelming success in the OBM track led to an application for a Health Resources and Services Administration (HRSA) primary care expansion grant (PCRE). This track was developed to be started at the matriculation of residency based upon the interest expressed from matched residents during the application season. The PCRE track mirrors OBM in its faculty support (primary care physicians as advisors), but the residents are also placed into the faculty primary care academic practice for their continuity clinic together on the same day. This is the same practice the OBM track residents attend for their ambulatory block. The PCRE track is unique in that ambulatory experiences were no longer grouped into 4-week blocks. Instead, year-long electives and primary care experiences are set up as “longitudinal blocks.” Elective time was traditionally spent with the specialty attending or a fellows’ clinic set-up where they could have their own cohort of patients to follow. This greatly increases their comfort in
managing disease diagnosis and treatment. For example, a patient with palpitations that is new to cardiology clinic and is eventually diagnosed with atrial fibrillation will be seen by the resident. During the progression of care, the resident would learn about palpitations work up and evidence, atrial fibrillation causes, management choices, anticoagulation, and appropriate use of Holter monitor for rate-control assessment. Sample schedules can be viewed below.

Logistics, challenges and solutions:

**Logistics:**
- A master schedule needs to be completed alongside the whole residency’s schedule
- Recruitment and advertising needs to occur all year
- A track director and administrative support person are essential

**Challenges:**
- Sufficient supply of skilled primary care physicians with the time and interest in graduate medical education teaching
- Compensating attending schedules for preceptor teaching time
- Resident schedule changes
- Finding the right patient volume
- Demand on specialists’ time
- Administrative time for a director and administrative support
- Residents looking for a change of clinic or a new preceptor asking to be a part of OBM

**Solutions:**
- The onus is on the resident to manage their schedule and changes are not allowed with less than six weeks’ notice, barring emergencies or health issues. This allows the resident to understand the true challenges in disrupting care for patients.
- A dedicated director is a necessity. This person is needed for substantial education of new faculty coming into the program and administrative leadership.
- Once established, these tracks served as an internal recruitment tool for new primary care physicians that had expertise in primary care, systems-based practice, and could start at a higher patient volume per clinic session. This “return on investment” produced institutional support moving forward.
- Eventually, the residents demonstrate increased efficiency in outpatient medicine and reduce the workload of the precepting attending. This trade off and the emotional connection that develops when working with residents long-term are the two reasons our specialists continue with the program year after year.
- A skilled administrative assistant for the coordination of schedules is required for the track director to be successful
- The OBM track director met with individual residents as the track grew to 22 of our 120 residents. This had affected productivity and patient care at their “home” continuity site. Residents interested in primary care, geriatrics, sports medicine, and primarily outpatient specialties (endo/rheum) were allowed to continue in the track. Residents who were not interested in primary care were required to use an elective block as an “OBM month.”
Teaching Chronic Disease Management
Halle G. Sobel, MD & Margaret Lo, MD, FACP

Introduction
Ambulatory education for internal medicine residency programs must have a robust chronic disease management curriculum. Residents must learn management through direct patient care as well as through didactic or active learning experiences. While each residency program has unique approaches to chronic disease management, it is important that residents become exposed to interdisciplinary experiences, interprofessional teamwork exposure, and their performance measures to have a successful learning experience.

Experiential Training on Chronic Disease Management
Many residency training have primary care clinics that operate with Patient Centered Medical Homes (PCMH). PCMH models often have team members to help care for patients with chronic diseases. Certain academic institutions have developed specialized chronic care clinics to provide residents experiential training in specific chronic disease management. Examples include, but are not limited to, the community-based HIV/AIDS Clinic at Montefiore Medical Center, the Grady Liver Clinic at Emory University, and the Multidisciplinary Resident Diabetes Clinic at the University of Florida. The curriculum for each specialized chronic care clinic is detailed in the respective reference. Universal to these clinics are its resident-driven, interdisciplinary, team-based exposure to managing patients with specific chronic diseases. Additionally, the Agency for Healthcare Research and Quality (AHRQ developed a step-by-step toolkit to implementing chronic care models in the academic learning environment. Topics include “Engaging Leadership,” “Harnessing the Academic Culture, “Implementing the Chronic Care Model”, and “Health Professions Education in Chronic Care”.

Chronic Disease Curricular Content
Faculty must supervise teaching residents using both evidence-based and patient-centered care as residents navigate the landscape of chronic disease management. Common conditions seen in the ambulatory setting should be included in the chronic disease curriculum which may occur through didactic lectures, self-administered web modules or active learning techniques. Each residency program will vary in their delivery of an educational curriculum. It may be a one, two or three year curriculum. Regardless of the strategy, important disease states to cover include: type 2 DM, COPD, Asthma, Chronic Pain, Chronic Kidney Disease, Tobacco Use, Hyperlipidemia, Hypertension, Obesity and Congestive Heart Failure. Certain programs may benefit from including other disease states such as addiction, homeless medicine and HIV care depending on the prevalence of a disease in the particular region. Existing web-based modules are available for programs to purchase and well-known products include the Yale Office-Based Medicine Education Curriculum and the Patient Education and Assessment Center (PEAC).
Chronic Disease Panel Management

In addition to learning about chronic diseases in the ambulatory curriculum and through direct patient care, many residency programs are developing formal panel management curriculum. This is a pro-active approach to care and often involves outreach by a team member to schedule an office visit for patients who have gaps in their care or other methods of care through community outreach. Many residency programs have electronic health records that can generate patient lists for the residents and these lists can be used to help residents track their progress in managing their patients with chronic diseases. Advanced clinics may have chronic disease registries and panel managers to help residents with chronic disease management. Additionally, the AHRQ and AAMC developed step-by-step guides to implementing panel management in clinical practice. The AHRQ module on “Facilitating Practice Management” includes important topics on appropriate panel sizes, practice monitor empanelment, and processes/policies needed for sustainability. The AAMC Step Forward module on Panel Management details out 6 steps for implementation and provides 10 individual toolkits available for download. These include teaching exercises on stakeholder training in panel management, preventative care registry reports, and performance measures for panel management. The module even provides a virtual connection to a practice consultant to help guide implementation.

Patient Self-Management

Residents should be exposed to teaching and helping patients learn self-management to make their particular disease. This is best done through a team approach but can be monitored by the residents when patients are seen for office visits. For example, for patients with diabetes, the residents can assess how patients are doing with self-blood glucose monitoring (if applicable), adhering to their medication regiment and following an exercise regimen.

Resident Assessment

It is imperative that residents are evaluated and provided feedback on how they are performing chronic disease management both at the patient care level and as well as their mastery of the content. Both Practice-Based Learning and Improvement (PBLI) and Systems-Based Practice Milestones are relevant to assess the performance of a resident in the arena of chronic disease management. Programs may also survey the residents to understand the impact of the delivery of the curriculum, perform self or peer chart audits and also look at in-training exam scores.

Curricular Development

The curriculum should be dynamic and continuously evolve to meet the continuously evolving landscape of medicine as well as the Accreditation Council for Graduate Medical Education (ACGME) competencies. In the authors’ experience, it is helpful to have a core group of faculty and residents to continuously analyze the curriculum to help to foster growth and meet needs of the individual program.
Conclusion
As the primary care workforce shifts to population-management, it is a crucial time for residency programs to have a robust and innovative chronic disease management curriculum for both excellent patient care and trainee education. It is quite possible that residents’ experience with a well-functioning clinic model could impact career choice, which can only help with the primary care shortage. 13
References


Long Acting Reversible Contraception (LARC) Curriculum

Rebecca A. Berman, MD

At Brigham and Women’s Hospital we have developed a three-pronged long acting reversible contraception curriculum.

All residents (categorical and primary care) get a 2.5 hour didactic and interactive training session on Long Acting Reversible Contraception Counseling. The first hour of the training is a lecture with an overview of LARC, including efficacy, indications and contraindications and counseling strategies. The second section entails 1.5 hours of small group counseling role plays using cases, with mentorship from general internist and OB-GYN faculty.

For our primary care residents only, we have a representative of Merck train our interns in nexplanon placement.

The most challenging portion has been getting residents enough practice doing the nexplanon to feel competent. While one is technically competent to place Nexplanon after the Merck training, we like to have our residents do 2-3 implantations and 3-5 removals to feel comfortable with any potential complications.

We have explored four ways to do this:

1) Family medicine experiences - The major limitation here was low frequency in a busy Family Medicine practice, however, if you have anyone who does dedicated women’s health or procedure clinics that could help.

2) Gynecology experiences - Again, the limitation was frequency of nexplanon placement in a given half day clinic.

3) Internal medicine providers in our larger resident/faculty practice who place nexplanons during dedicated urgent care half days - This has proved to be our best experience since we have more control over how these sessions work. To avoid the issues of low frequency, interested residents schedule their “patient follow up” time during these half days and are paged by the relevant attending when a nexplanon patient arrives. The remainder of their “patient follow up” time is spent doing their clinic paperwork from their continuity clinic. Residents can do this multiple times over the course of the year to gain adequate experience. A scheduler makes sure only one resident does it on a given half day.

4) We have also trialed having the internists who are trained in nexplanon available as on-call preceptors for resident primary care patients willing to get nexplanon. This is just getting off the ground and has been limited by having enough preceptors who feel competent so that someone is available. Ideally, you would have five attendings who are competent so that each day of the week a different attending could be on-call. This method avoids the issues of low-volume in a given half day. No-show rates for nexplanon placement are reasonably high in our clinic which has added an extra layer of complication.
Creating a Home Visit Curriculum

Stacy Charat, MD

Scope of Practice/Goals of Visit
Home visits can address a wide range of goals, and the structure of visits will be informed by the intended scope of practice.
- Social interaction to promote patient-physician relationship
- Social determinants of health exercise
- Home safety evaluation
- Geriatrics assessment/mental status evaluation
- Full medical appointment
- Specific chronic disease management (CHF, hypertension, diabetes)
- Medication reconciliation
- Post-discharge visits and/or readmission prevention

Identify Potential Partnerships
Consider partnering with existing programs at your institution or in the community to harness available resources and ensure sustainability of the program.
- High risk care management programs (often run by nursing staff) that identify high risk patients
- Existing Home-Based Primary Care programs (VA, family medicine, geriatrics, private community physicians)
- Local EMS companies
- Community agencies (local neighborhood or cultural organizations, churches, elder care programs)
- Home care agencies (visiting nurses, home health aide programs)

Legal Concerns
Confer with your local residency program leadership, risk management, and malpractice insurance agency to ensure that your residents are protected for the type of visit that is planned.
- Does your malpractice insurance cover residents for visits provided in the home?
- Will residents be directly supervised by attendings during the visit, or will they discuss the cases after the fact?
- Can you use telemedicine to support supervision during visits?
- How will you document patient visits, if at all?

Financial Concerns
Consider whether you intend to bill for visits
- What are the billing requirements for a home visit in your healthcare system?
- How does attending supervision (or lack thereof) impact billing?
Safety Concerns
Providing guidelines for the careful selection of patients to visit can reduce unnecessary risks for your residents.
- Consider screening for the presence of dogs, weapons, family members, children in the home, mental health/substance abuse
- Research the neighborhoods residents plan to visit to ensure they have safe access to patients (without undermiming the educational value for the residents to learn about social determinants of health in neighborhoods with safety concerns)
- Consider whether an attending will accompany residents
- How will residents travel to and from the patient homes? Are there institutional vehicles available? Public transportation? Private vehicles?

Supplies
Provide a “black bag” for residents to take with them for visits and include items that are relevant for the intended scope of practice.
- Blood pressure cuff and stethoscope
- Pulse oximeter
- Glucometer and test strips
- Monofilaments
- Wound Care supplies: gauze, sterile saline, xeroform, tegaderm, Kerlix, ACE wrap
- Blood drawing supplies: tourniquet, tubes, gauze, band aids, needles, syringes, sharps container, ice packs/cooler
- Mini-mental status or SLUMS assessment forms
- Home safety evaluation checklists (see References)

Example Curriculum from the UCSD Internal Medicine Primary Care Pathway
- During PGY-1 and PGY-2 years, all residents shadow providers in the home based primary care program at the VA on their geriatrics and continuity clinic rotations
- Primary Care residents participate in a 1-hour lecture/discussion on home visits from providers who perform home visits (partnership with the geriatrics fellowship.)
- We first perform a group home visit with an attending, for a patient in the attending’s panel
- Prior to the first independent home visit, we perform a workshop on learning about the neighborhoods of the patients they intend to visit, including a review of common social determinants that impact health. This includes:
  - Google mapping local grocery stores, parks, gyms, community centers, etc.
  - Using the local Department of Public Health website to identify markers of health by zip code
  - Use local public transportation websites to map route to office visits
- Residents go in pairs to visit 2 patients (one from each resident’s panel.) Patients are carefully selected by the residents, in discussion with faculty, to maximize safety and educational opportunities.
- We facilitate a group debriefing session to review the home visits and discuss the benefits and challenges.
Select References and Resources

University of Miami Home Safety Module
https://www.pogoe.org/AngelUploads/applications/homesafety/HomeSafety.html

University of Miami Home Safety Checklist
https://www.mededportal.org/publication/1063/

UC Denver Family Medicine Home Visit Curriculum Overview

UC Irvine Checklist for a Home Visit of a Recently Hospitalized Geriatric Patient
https://www.pogoe.org/productid/20798


Advocacy Curricula

*Catherine Rich, MD & John Moriarty, MD*

Advocacy is recognized by our professional organizations as an essential component of physician’s professionalism. While by no means is the need for advocacy unique to primary care, many primary care tracks across the country have created robust and long lasting advocacy curricula as a key component of their program that differentiates them from categorical counterparts. Residents often embrace these curricula as they tap into their innate sense of altruism and can be an antidote to the many frustrations they experience working on behalf of patients.

Advocacy curricula in primary care tracks will vary depending on the expertise of faculty, the interests of residents and the issues that are pertinent to your program/hospital/surrounding community. Most programs contain a didactic and an experiential component. The didactics can focus on skills (how to write persuasively, how to speak influentially, etc), as well as historical and political context for health inequities that residents may experience through their care of patients. An understanding of the social determinants of health is a necessary part of any advocacy curriculum. In addition, basic education on understanding the legislative process and points at which physicians can influence debate can be helpful for residents. The experiential component will draw from local resources and issues. For instance, many programs partner with local advocacy groups to do Hill Days, in which residents are prepped to speak with legislators about issues relevant to health care.

Advocacy curricula are most successful when they are responsive to the needs and interests of the resident adult learner. They require protected time in the curriculum for both didactic and experiential components. Faculty should be selected and supported in their time to insure a high-quality experience.
Quality Improvement Curriculum
Rachel Wong, MD & Patricia Ng, MD

Educational Goals and Objectives

Understand fundamental principles and concepts in quality improvement.

Gain familiarity with models of quality improvement, basic terminology and applications of quality improvement tools.

Obtain skills in redesigning health systems and enhancing quality and safety of patient care through implementation of a QI project.

Apply knowledge through identification of areas for improvement, data collection and storage, analysis, implementation of continuous quality improvement and reporting.

Engage in interdisciplinary collaboration to improve care processes and patient outcomes and provide meaningful contributions at an institutional level.

Understand the role of quality improvement in individual and institutional practice, and in relation to national priorities and benchmarking in quality initiatives.

Educational Milestones

Practice-Based Learning

- Appreciate the responsibility to assess and improve care collectively for a panel of patients (PBLI-A1)
- Perform or review audit of a panel of patients using standardized, disease-specific, and evidence-based criteria (PBLI-A2)
- Reflect on audit compared with local or national benchmarks and explore possible explanations for deficiencies, including doctor-related, system-related, and patient-related factors (PBLI-A3)
- Identify areas in resident's own practice and local system that can be changed to improve the processes and outcomes of care (PBLI-A4)
- Engage in a quality improvement intervention (PBLI-A5)

Interpersonal Communication Skills

- Engage in collaborative communication with all members of the health care team (ICS-D3)
Professionalism
• Recognize that disparities exist in health care among populations and that they may impact care of the patient (P-K1)
• Advocates for appropriate allocation of limited health care resources (P-K3)

Systems-Based Practice
• Work effectively as a member within the inter-professional team to ensure safe patient care (SBP-B2)
• Recognize health system forces that increase the risk for error including barriers to optimal care (SBP-C1)
• Identify, reflect on, and learn from critical incidents such as near misses and preventable medical errors (SBP-C2)
• Dialogue with care team members to identify risk for and prevention of medical error (SBP-C3)
• Understand the mechanisms for analysis and correction of systems errors (SBP-C4)
• Demonstrate ability to understand and engage in a system level quality improvement initiative (SBP-C5)
• Partner with other healthcare team professionals to identify, propose improvement opportunities within the system (SBP-C6)

Expected Outcomes
It is the expectation that by the end of PGY3 year of training in Internal Medicine, residents will be familiar with the principles, methodology and practice of quality improvement and that they will be ready for unsupervised practice in the below activities:
• Analyze own clinical performance data and actively work to improve performance
• Actively engage in quality improvement initiatives
• Demonstrate the ability to apply common principles and techniques of quality improvement to improve care for a panel of patients

Teaching Methods
• Didactic Learning
• Quality Assurance Experience (eg. Patient Huddle, Peer Review/QA Case)
• Project-Based Experiential Learning

Didactic Materials
• IHI Open School courses 101-105 (intro), 201-202 (intermediate), 301 (project-based)
  ○ http://app.ihi.org/lms/onlinelearning.aspx
• QI and Research: SQUIRE 2.0 Guidelines
  ○ http://www.squire-statement.org
• QI and EBM: JAMA Guide How to Use and Article About Quality Improvement
  ○ http://jamanetwork.com/journals/jama/article-abstract/186967
**Project-Based Experiential Learning Materials**
- PDSA (Plan-Do-Study-Act) worksheet
- SMART Aim Statement
- Root Cause Analysis: Fishbone Diagram
- Flow Chart
- Run Chart/Control Chart

**Project-based QI “X + Y” Structure (EXAMPLE “4 + 1”)**

**Example 1**
- 5 QI projects for the clinic (1 project/grp)
- Protect QI time for each resident group q5 weeks (1 session)
  - Same residents/same project
- Each QI group completes all tasks for each project cycle (PDSA planning, implementation, evaluation q5 weeks)
- Interrupted resident implementation of the PDSA at q5 week intervals
- Complete 2-3 PDSA cycles/year (depending on # of weeks needed for implementation)
- Requires 5 faculty project preceptors
  - Meet q5 weeks with same QI Grp

**Example 2**
- 2 QI projects for the clinic (longitudinal grp)
- Randomize residents to Project 1 or 2
- Protect weekly QI time for residents from each project (1/2 session)
  - Different residents/same project
- “Shift” leadership for PDSA cycles
  - Grp 2 leads PDSA cycle 7/8-8/12
  - Grp 3 leads PDSA cycle 8/19-9/23
- Facilitates continuous resident implementation of PDSA cycles over the “4+1” 5-week block
- Complete 10 PDSA cycles/year
- Peer evaluation of PDSA Cycle Planners
- Requires 2 faculty project preceptors
  - Meet weekly with different QI Grp

**Faculty:** +/- QI or Patient Safety Associate Program Director, Clinical Preceptors

**Staff:** Care Coordinators, secretarial staff, RNs, LPNs, CAs
Program Checklist

- Identify QI high priorities areas for your organization (eg. clinic reporting metrics) to align resident QI projects with institutional goals
- Map out the process and requirements for obtaining permission to carry out QI at your institution, such as IRB or CMO approval
- Identify interested faculty preceptors, faculty members with QI expertise, and bio-statistical resources at your institution for project support
- Create a QI schedule with protected time for residents to plan, implement and evaluate their QI projects
- Identify institutional, regional or national opportunities for residents to present their QI work
- Discuss with QI or clinic administrators if there are opportunities for resident involvement in QI processes such as patient huddles, review of QA cases, etc.

Assessment

- IHI Open School Modules on Quality Improvement certificate
- Residents are evaluated using Direct Observation Tools during their QI project sessions (example below)
- QI preceptors provide biennial feedback to Clinical Competency Committee
PDSA Worksheet Template

Problem Statement:

SMART Aim Statement: (Specific, Measurable, Achievable, Realistic, Time-Oriented)

Objectives

<table>
<thead>
<tr>
<th>Describe the objectives of your PDSA</th>
<th>Measure to determine success</th>
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<tbody>
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</table>

**Plan**

<table>
<thead>
<tr>
<th>List the tasks needed to set up this test of change</th>
<th>Person responsible</th>
<th>When to be done</th>
<th>Where to be done</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Do**

Describe what happened when you ran the test

**Study**

Describe the measured results and how they compared to the predictions

**Act**

Describe what modifications to the plan will be made for the next cycle from what you learned  (Adapt/Adopt/Abandon)
FEEDBACK FOR QI PDSA CYCLE PLANNERS

Objectives:

Intervention:

Time Period:

Group Leaders:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The intervention was effective to meet the stated goal</td>
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<tr>
<td>This intervention was feasible in this setting</td>
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<tr>
<td>The intervention adds value to patient care</td>
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<tr>
<td>This intervention is sustainable in this setting</td>
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<td></td>
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<tr>
<td>This intervention should be adopted into practice</td>
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</tbody>
</table>

Comments/Suggestions:
SMART AIM Worksheet
Review of Aim Statement Worksheet

Coalition Name:  

Aim Statement being reviewed:  

Review the Aim Statement for the components of a SMART AIM = Specific, Measureable, Achievable, Realistic and Timely

1. **SPECIFIC** – Is the statement precise about what the team hopes to achieve?

2. **MEASURABLE** – Are the objectives measureable? Will you know whether the changes resulted in improvement?

3. **ACHIEVABLE** – Is this doable in the time you have? Are you attempting too much? Could you do more?

4. **REALISTIC** – Do you have the resources needed (people, time, support?)

5. **TIMELY** – Do you identify the timeline for the project – when will you accomplish each part?
Opioid Education Strategy

Stephen Knaus, MD

St. Vincent Internal Medicine Residency in Indianapolis holds a 3-day Clinic Boot Camp during new intern orientation during the last week of June. One half day of that Clinic Boot Camp is devoted to a workshop on prescribing of controlled substances with a focus on opioids. The workshop includes:

- 30-40 minute didactic from Clinic Director/APD on evidence-based use of opioids in chronic non-cancer pain (review of the literature)
- Review of Clinic Controlled Substances Policy
- Review of State Laws surrounding opioid prescribing
- Proper EMR documentation of chronic pain visits
  - Learn to use a macro in EMR to prompt proper documentation
- Review of the Clinic’s Controlled Substances Treatment Agreement/Contract
- Review of the DEA Drug Schedules (Schedules I-V) and implications for prescribing
- How to order and interpret Urine Drug Testing
- Review of recommended tools for risk assessment including COMM, PHQ-2/9, SOAPP-R, Opioid Risk Tool
  - Practice finding the tools in the EMR
- Set up access to INSPECT pharmacy database

We do not authorize our new interns to prescribe controlled substances in the continuity clinic during the first 6 months of intern year (the faculty staffing the case with resident prescribes). Interns are provided a set of articles to read and then required to complete a 20 question quiz on an electronic platform (Quizzegg) prior to being authorized to prescribe.
Chronic Pain Management Curriculum

Patricia Ng, MD & Rachel Wong, MD

Educational Objectives
Through this curriculum, residents will be able to:

1) Define chronic pain
2) Describe the physical and psychological factors that may contribute to chronic pain
3) Perform a comprehensive pain assessment (Ex. PEG score)
4) Describe pharmacological and non-pharmacological therapies available for chronic pain
5) Identify when opioid analgesics are indicated
6) Screen and risk stratify patients for opioid misuse (Ex. Opioid Risk Tool)
7) Describe the risks and benefits of opiate use
8) Screen and identify opiate dependence, tolerance, and misuse
9) Understand the elements of a chronic pain policy and initiate a pain patient agreement
10) Monitor and titrate chronic opiate therapy, including calculating opioid dosages to convert medications
11) Demonstrate how to use the state’s prescription drug monitoring program (PDMP)
12) Educate patients on opiate overdose prevention and treatment (ex. Prescribing naloxone kit)
13) Interpret urine toxicology tests and manage an abnormal urine screen
14) Identify local referral networks for chronic pain management, which may include Pain Management specialists, Addiction Medicine specialists, Orthopedics, Physical Therapy, Mental Health Providers, etc.
15) Identify local resources for treating opiate misuse, including Narcotics Anonymous, mental health centers, addiction medicine specialists, substance abuse detox/rehab programs, etc.

Teaching Methods
- Didactic learning
- Self-learning online modules
- Specialty clinic rotation
  - Pain Management
  - Addiction Medicine / suboxone or methadone clinics
  - Substance abuse detox/rehab
  - Physical Therapy
  - Orthopedics
  - Chiropractors
  - Acupuncture
  - Osteopathic Manipulative Treatment Clinic
- Community based organization learning
  - Narcotics anonymous meeting
  - Chronic pain support groups
Didactic Resources

CDC Guidelines for Prescribing Opioids for Chronic Pain  
https://www.cdc.gov/drugoverdose/prescribing/guideline.html

CDC checklist for prescribing opiates  

Substance Abuse and Mental Health Services Administration (SAMHSA)  
https://www.samhsa.gov

SCOPE of Pain: Safe and Competent Opioid Prescribing Education  
https://www.scopeofpain.com/  
*Free online modules created by Boston University to educate providers on safe opiate prescribing. Website includes a trainer’s toolkit and videos on performing pain assessments and counseling patients on aberrant behavior.*

CAPC: Center to Advance Palliative Care  
https://www.capc.org/  
*Free online case-based modules to improve palliative care and pain management skills for providers. There are several clinical skills sections, including 14 modules on pain management.*

Boston University’s Immersion Training in Addiction Medicine  
http://www.bumc.bu.edu/care/education-and-training-programs/crit/  
*This is a 4 day immersion training for incoming chief residents, their faculty mentors, and junior faculty on state-of-the-art methods to diagnose, manage, and teach about addiction medicine.*

Opiate Risk Tool (ORT)  

American Chronic Pain Association  
https://theacpa.org/

Prescribe to Prevent: Prescribe Naloxone, Save a Life  
http://prescribetoprevent.org/

Narcotics Anonymous  
https://www.na.org/
Program Checklist

- Learn your state laws and requirements for opiate prescribing and prescription drug monitoring
- Identify pain management referral resources available in your area (Ex. Pain management, addiction medicine, suboxone/methadone prescribers, palliative care providers, substance abuse rehab/detox centers, acupuncture, physical therapy, etc.)
- Create a chronic opiate use policy for your office
- Create a chronic opiate use patient agreement
- Create a chronic opiate use clinic note template
- Develop a clinic workflow for managing patients with chronic opiate use
  - How often do patients need to follow up?
  - Who manages refills?
  - How often should there be urine tox screen?

Sample Curriculum

Stony Brook Internal Medicine Residency Program: 4 + 1 Schedule

- Didactics
  - Clinic orientation
  - Pre-clinic conferences
  - CAPC modules on pain management
  - SCOPE of Pain online modules
  - Workshops on safe opiate prescribing, screening and treatments for substance abuse led by pain management and addiction medicine specialists

- Rotations
  - 1 week at Stony Brook Pain Management Center (includes participating in injection clinic an following a pain psychiatrist)
  - 2 weeks at a local mental health clinic and VA Psychiatry
  - 1 week with a community primary care physician who is a suboxone prescriber and also manages a local hospital substance abuse detox unit
  - 2 weeks of musculoskeletal block where residents rotate with orthopedics, physical therapy and occupational therapy
  - 1 week palliative care elective

- Continuity Clinic
  - Patients who are prescribed chronic controlled substances are on a 5-week follow-up (if high risk for substance abuse) or a 15-week follow-up schedule
  - Residents use a Pain Ambulatory Assessment (PAA) Clinic Template for each visit
  - Medication refills received between follow-up visits are reviewed by a designated clinic nurse and forwarded to an assigned clinic attending for review
Sample templates below:

- Chronic Non-Cancer Pain Treated with Opiates Policy
- Controlled Substance Patient Letter
- Controlled Substance Treatment Agreement
- Pain Ambulatory Assessment (PAA) Clinic Visit Template
- Clinic Workflow for patients on chronic opiates
Sample Policy: CHRONIC NON-CANCER PAIN TREATED WITH OPIATES

Providers will adhere to New York State regulations and current Standards of Medical Care with respect to chronic pain evaluation and management. Providers will prescribe opioid medication, when necessary, for patients with chronic pain in a safe and effective manner.

Area: Outpatient practices of the Division of Geriatrics, General Internal Medicine and Hospital Medicine, Department of Medicine at SUNY Stony Brook


Purposes:
Provide a framework for management of chronic pain in the primary care setting for adult patients (ages 18+).
Provide guidelines regarding prescription and monitoring of controlled substances for long-term therapy.

Note: This policy does NOT apply to patients with chronic pain who are receiving active cancer treatment, palliative care or end-of-life care nor does it apply to patients with severe mental or physical incapacity whereby the person is unable to express himself/herself in a manner understood by others.

Chronic Pain Definition: Pain lasting >3 months or past the time of normal tissue healing.

Procedures:

Overview: The practice will follow the CDC Guidelines for Prescribing Opioids for Chronic Pain – United States, 2016 (see attached CDC Recommendations and Checklist for prescribing opioids for chronic Pain.) The practice will train patient care teams consisting of patient care coordinators, clinical nursing assistants, nurses, nurse practitioners and doctors to support high-risk patients in safe self-management. The practice will strive to use non-opioid medication and other therapies such as physical therapy before prescribing opioid treatment. The practice will utilize “universal precautions” including pain agreements, urine drug testing and pill counts, when necessary, Opioid Risk Tool and refill and cross-coverage systems to assure patient safety.

Counseling: The patients and providers will establish personal health targets with regard to pain control, functional status, compliance, and weight, which will be recorded in the care plan.

Education: Staff will provide patients with educational materials and information on community and online resources resource to help them control their persistent pain.
OFFICE WORKFLOW

PRIMARY CARE PROVIDER (PCP) RESPONSIBILITIES

ASSESSMENT: At a minimum, patients on chronic opiate therapy will be assessed initially (preferably before long-term narcotics are prescribed) and at least annually. More frequent assessments may be needed based on risk of opioid abuse or overdose.

a). Primary Care Providers will perform a detailed history (including onset, location, radiation, quality, duration, alleviating/exacerbating triggers and medication history) and physical exam to characterize the pain and to determine the most likely cause and mechanism of the pain (e.g., neuropathic, inflammatory, muscular, mechanical/compressive). Providers will also assess patients for psychiatric causes of pain (e.g., depression, anxiety or other comorbid psychiatric disorder) and assess current functional status.

b). Providers will order any further testing necessary for evaluation of pain, place referrals to appropriate specialists, including pain management experts when indicated, and review diagnostic studies and consultation reports.

c). Providers will complete the Ambulatory Opioid Risk Tool available in the ad hoc section of the EMR. A score of 3 or lower indicates low risk for future opioid abuse, a score of 4-7 indicates moderate risk for opioid abuse and a score of 8 or higher indicates a high risk for opioid abuse.

d). Providers will order screening urine toxicology. Patients will be asked to record the exact narcotic intake on the day of and 48-72 hours prior to toxicology testing.

e). Providers will assess patient adherence to various aspects of treatment and screen patients for any substance abuse. “Red flags” will include certain patient behaviors such as seeking pain medications from multiple providers, requesting pain medications after hours, losing prescriptions, etc.

TREATMENT

1) Providers will treat patients with non-pharmacologic and non-opioid pharmacologic therapy and only consider opioids if the expected benefits for both pain and function outweigh the risks to the patient.

2) When opioids are used for acute pain, providers will prescribe the lowest effective dose of immediate-release opioids and prescribe no greater quantity than that needed for the expected duration of pain severe enough to require opioids. Providers will adhere to New York State law which only allows for 7 days of opioid therapy for acute pain for the initial prescription. Providers
may reorder pain medications after assessing the efficacy of the opioid analgesic in alleviating the acute pain versus the side effects of the drugs.

3) Before starting opioid therapy for chronic pain treatment, providers will document the lack of effectiveness of more conservative therapies and establish, in conjunction with the patient, goals of care, including a realistic goal for pain control and function and anticipated duration of therapy. Providers will discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy. Patients must sign a Pain Agreement to document these discussions and their agreement with the plan of care.

4) When starting opioid therapy for chronic pain, providers will prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids and initiate step-wise treatment starting with the lowest effective dosage. Providers will utilize “Morphine Equivalent” analgesic charts to select appropriate starting doses and frequencies of the selected narcotic drug and clearly delineate medication directions and the quantity prescribed on the prescription form. With rare exceptions, providers will only prescribe narcotic analgesics during business hours and patients will be informed of this policy.

5) Providers will evaluate benefits and harms of narcotic analgesics with patients at each visit but especially within the first few weeks of starting therapy or of escalating dose. Providers will denote in the care plan the frequency of visits needed for pain management. In general, patients on chronic narcotic analgesics will be seen at least every three months but those who are deemed high risk for substance abuse or drug overdose will be seen more frequently – e.g., every 4-5 weeks and those deemed very low risk for whom it is a hardship to come to the office may be seen less frequently at the discretion of the provider.

6) Providers will incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥50 ME/day), or concurrent benzodiazepine use, are present. Fentanyl patch will only be prescribed for patients with moderate to severe pain who have already been receiving opioid therapy for two weeks or more and who are on a narcotic daily dose equivalent to 60 mg or more of morphine sulfate. Providers will warn patients and families of the risk of hypoventilation occurring with high dose long-acting narcotics.

7) Providers will review PDMP (I-Stop) data when starting or renewing opioid therapy for chronic pain. When prescribing opioids for chronic pain, providers will use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs. For low risk patients, providers may order a 30 day supply of medication with two renewals by labeling the prescription “Schedule D”.

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8) Providers will offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

9) Providers will designate which patients require pre-visit planning for Pain Management the week prior to the anticipated visit.

DOCUMENTATION:

A Pain Ambulatory Assessment (PAA) template is recommended for documentation purposes, as it includes all necessary elements (see Figure 1) although it is not required so long as the evaluation is documented, the nature and cause of the pain are specified, and the plan of care is carefully delineated in the note. These visits for chronic opioid treatment will be labeled in the EMR as “Pain Ambulatory Assessment” (PAA) notes.

At a minimum, a plan for chronic opiate prescription and pain management should be documented at each visit. This plan should include explicit treatment goals as well as directions on whether to continue, change or taper the current pain medication regimen, whether specialty follow up is required, and the timeline for frequency of toxicology screening and future visits. A sample Pain Assessment and Plan template is included in Figure 2.

NURSING, PCA AND CLERICAL STAFF RESPONSIBILITIES

a) Patients who require frequent renewal of controlled substances will be scheduled for a Controlled Substance Medication Renewal Visit (20-minute allocation) every 4-5 weeks that is separate from regular continuity or urgent care visits.

b) Pre-Visit planning - Prior to the scheduled pain visit or established follow up visit in which pain and opioid therapy will be reviewed, pre-visit planners will record for the primary care provider the following information: type of pain, controlled substance dose and frequency, date of last Pain Ambulatory Assessment note, last Ambulatory Opioid Risk Score and date, date of last urine drug testing and results, date of last refill of controlled substance, a copy of the I-Stop recent drug prescription profile, the Current Pain Management Plan, including frequency of visits, and whether or not the patient is due for a urine toxicology screen.

c) Medication Refill Requests will be triaged through Nursing. Patients will be advised to call 3-5 business days before they will run out of medication. The triage nurse will gather the information listed in section b above and will send this information to the PCP or covering provider and will also denote the date of the next follow up visit in the message. Medication refill frequency will be
determined by the Primary Care Provider and denoted in the EMR. Medications will be refilled for 30
days but for patients with chronic pain the PCP or covering provider may designate “Schedule D” on the
prescription and order 2 refills for a total supply of 90 days if the patient is deemed to be “low risk” for
substance abuse or overdose.

PERSONAL CARE ASSISTANT (PCA) RESPONSIBILITIES

a) At every visit, the Personal Care Assistant (PCA) will inquire about pain and will ask the patient to
rate their pain and its impact on their function and quality of life using the PEG Scale (see attached).
b) The PCA will ask the patients which medications require refill or prescription. The PCA will report the
level of pain and medications for renewal to the PCP.
c) If urine toxicology is required, the PCA will fill out the toxicology laboratory forms for the controlled
substances specified by the PCP and send the urine sample to the lab. Currently such requests will
go to the Aegis laboratory.

QUALITY IMPROVEMENT

The Quality Improvement Committee will perform random chart audits of patients on chronic opioid
therapy to determine whether the cause and severity of pain are documented using standardized tool
and whether or not a follow up plan is documented when pain is present.

ATTACHMENTS

Summary of CDC Guideline
Information for Patients
ORT Tool
PEG Score
Pain Agreement
Controlled Substance Patient Letter Template

Dear Patient,

You are receiving this letter because you are a patient in our Resident Clinic at ________ and receive prescriptions for a controlled substance on a chronic basis. We are writing to inform you of a new policy that we are instituting to improve the continuity and quality of your care.

Our previous policy required a monthly office visit for prescriptions of controlled substances, but to streamline this process, we will now be able to renew these prescriptions directly to your pharmacy with electronic prescriptions.

We will still require an office visit every ___ weeks and continued adherence to our clinic’s opioid prescribing policy and procedures. A copy of this policy may be obtained at any time at your next office visit.

Instructions for medication renewal prior to office visit:
- Our practice may only prescribe a 4 week supply of controlled substances at one time.
- At least 3-5 days business days prior to running out of medication, request medication renewal via telephone or patient portal email in order to avoid lapses in your prescriptions.
- Please contact our office at ______ and leave a message with our nurse ______ requesting renewal of your medication for pain or anxiety medications only.
- Prescriptions will be filled from 9am to 5pm on Monday through Friday.

We hope this transition will improve your continued care. As always, please feel free to contact our office with any questions or concerns your may have with our new policy.

Sincerely,

[Insert Resident Clinic]
Controlled Substance Treatment Agreement Template

Dr. _____________________________ has explained the risks and benefits of the controlled substance (medications may include opiates, benzodiazepines, sedatives, muscle relaxants and stimulants) and I give my consent to treatment with controlled substances in my medical care.

I, _________________________________, understand that I must comply with the following rules or I will not be given a prescription for the controlled substance.

I agree to use only one pharmacy for filling prescriptions for any controlled substance.

Pharmacy ___________________________      Telephone ____________________________

GOALS: The goals of chronic pain management are
1) To improve your ability to function in your daily life
2) To lower your pain

Efficacy: Some people who take opiates will get relief from their chronic pain. I understand that my provider may decide to stop the opioid if after increasing it adequately, my pain and function have not responded positively.

SIDE EFFECTS: I understand these medications have significant side effects and potential adverse, effects, which include but are not limited to: impaired ability to concentrate, constipation, dizziness, drowsiness, itching, nausea of GI upset, difficulty urinating, skin rashes, trouble breathing, mental slowing and loss of coordination, sexual dysfunction.

DEPENDENCE: Taking opioids regularly for a long period of time usually causes physical dependence which means that your body adapts to the medication and experiences withdrawal if the medication is stopped or lowered too quickly. Symptoms can include runny nose, difficulty sleeping, agitation, abdominal pain and severe discomfort.

ADDICTION: Addiction can occur in a small amount of people who take daily opioids, and is characterized by behaviors such as loss of control of drug use, compulsive use and craving, and continued use despite harm or risk to the person.

RISK OF OVERDOSE: There is potential for overdose, which could cause you to stop breathing with risk of death if you take too much opiate medication, or if it is used in combination with benzodiazepines (eg. Xanax, Valium), hypnotics (eg. Ambien, Lunesta) or alcohol.
I agree to take my medications exactly as prescribed by my doctor.
I will abstain from drinking alcohol or using any recreational drugs.
I will not operate heavy machinery, or service in any capacity related to public safety.
I am aware medications may impair my ability to drive and I should use caution or designated driver particularly immediately after dose and when starting new medication.
I agree to meet regularly, as recommended by my practitioner to monitor ongoing effectiveness of therapy and renewal of medication.
I agree to see a specialist in the management of these medications if it becomes necessary.
I agree to random laboratory drug screens or other diagnostic tests when ordered by physician.
I will not share, sell or trade my medications with anyone.
I will not attempt to obtain any controlled medications, including opioid pain medicines, controlled stimulants or antianxiety medicines from any other physicians.
I will safeguard my pain medicine from loss or theft. I understand that lost or stolen medicine will not be replaced.
I agree that refills of my prescriptions for pain medicine will be made only during regular office hours. No refills will be available during evenings or weekends.
I agree that if I escalate my dose of pain medication without consulting my practitioner, that this may indicate a problem in my ability to use the medication as prescribed and may necessitate termination of the use of the medication.
I will make every effort to participate in self-help activities to improve my overall conditioning and pain tolerance (e.g. Physical therapy, swimming, yoga, Tai Chi, meditation, stress management relaxation or pain program).
Failure to comply with any part of this contract may necessitate termination of the use of the medication.

By signing this form, I authorize my provider’s office to contact any and all groups and organizations involved with my care and involved in the investigation of medication and drug abuse. I give permission to my provider to discuss my care with past caregivers, all pharmacies and policing agencies. This also gives these caregivers and pharmacies permission to share with my provider information about my past treatments and care.

Patient Signature

Date

Witnessed

Date

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Pain Ambulatory Assessment (PAA) Clinic Note Template

History of Present Illness:

Location ===
Duration ===
Radiation ===
Quality ===
Severity (1-10) ===
Exacerbating Factors ===
Alleviating Factors ===
PEG Score (0-10) ==

1) Date of last refill of controlled substance: ===
2) Prescription Monitoring Program (PMP) registry consistent: Reference # ===
3) Last intake of controlled substance (Date/Time): ===
4) Last urine drug testing (Date): ===
5) Pain contract documented in the chart (Date): ===
6) Prior established functional treatment goal:

Type of controlled substance: Opiates/Anxiolytics/Sedatives/Other ===
Opioid Risk Tool Score:
Concurrent use of benzodiazepines: yes/no
Prior pharmacologic treatment:
Prior non-pharmacologic interventions: Physical Therapy/steroid injections/trigger point injections/acupuncture/counseling

Relevant Imaging:

Symptoms: Controlled/Uncontrolled
Compliance: Taking medications as prescribed/Not taking medications as prescribed
Etiology of Pain: Musculoskeletal/Neuropathic/Inflammatory/Neoplasm/Trauma/Other
Functional Status: Fully functional/Functional Limitations with extended activities/Functional with Assistive Devices/Functional Limitation with ADLs
Red Flags: None/Persistently Increasing Pain/Fever/Confusion/Falls/Weight Loss
Side Effects: None/Constipation/Nausea/Vomiting/Itching/Sedation
High Risk: Failed urine drug screen in the past/Referred to Substance Abuse in the past/Hospitalized for overdose in the past/ORT score ≥8
Mental Health Disorders: None/Depression/Anxiety/Substance Abuse/Bipolar Disorder/PTSD/Schizophrenia/ADHD
Physical Exam:

Labs/Imaging:

Assessment/Plan:

Plan: Continue current regimen/Change medication regimen/Taper or discontinue controlled substance

Advised that medications may impair ability to drive or operating heavy machinery
Advised to avoid bed rest
Counseled and provided educational materials and resources

Follow up: Follow up in 5 weeks/ Follow up in 15 weeks
Specialty Follow up: None/Requires Pain Management/Requires Substance Abuse Program/Other
Recommended toxicology screen: Every 5 weeks/Biennial/Annual/Other===
Established functional treatment goal:
Sample Flow Diagram for Controlled Substance Management in Resident Clinic

Legend:
- Patient
- Resident
- Attending
- RN

1. Patient Encounter
2. Provider Completes Template
3. Assess with attending for 5 week (High Risk) or 15 week (Low Risk) Follow up
4. Message to RN re: f/u
5. Patient Requests Med Renewal
6. Message to RN
7. RN reviews PAA note and generates Rx with RN refill template
8. Attending Reviews and Refills

*Clinic Pain Med Management Guidelines
*Resident/Attending Education

Are patients requesting in timely manner?
Is RN getting messages?