# Appendix

The following appendix has been designed to provide details about the composition of implementation teams, pilot clinics chosen within each institution, meeting schedules, time frames, and other practical methodological information. Future teams who undertake the challenge of Patient-Reported Outcome (PRO) planning may find this information useful as a model and helpful in setting expectations concerning the complexity of a PRO pilot implementation project.

**Table A. Pilot clinics selected for initial implementation of PRO measures.** Universities selected one clinic each at the University of Chicago and the University of Illinois at Chicago and two clinics at the University of Florida based on their suitability as PRO pilot sites. This table provides detail on how each clinic was selected. In all cases, clinical leadership and willingness to experiment with new workflows and methods were key to pilot site selection.

| **Institution and Clinic** | **Detail Regarding Selection of Pilot Clinics** |
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| **University of Chicago Department of Orthopaedic Surgery and Rehabilitation Services** | Several potential clinical areas were considered and approached. Initial outreach by the EASI-PRO project site leader included Psychiatry and Primary Care. The Orthopaedics clinic was chosen as the University of Chicago Medical Center (UCMC) PRO pilot site because of the presence of an enthusiastic clinician champion familiar with the extensive research on PRO adoptions within the subspecialty of Orthopaedic surgery and, specifically, foot and ankle research. That research shows that patients who complete PROMIS pre-operatively have more post-operative success, that the PROMIS Computer Adaptive Test outperforms other measures established for foot and ankle conditions, and that PROMIS metrics are sensitive to patient-reported changes in health.[[1]](#endnote-1) In addition to demonstrating clinical relevance, UCMC Orthopaedics is prepared to provide engaged leadership and project stewardship. Thus, the interest of a committed and enthusiastic clinician partner (who is actively undertaking informatics training while practicing as a physician), plus procedural-based applicability of the instruments, led to an early decision to focus on orthopaedic surgery. |
| **University of Florida Division of Endocrinology, Diabetes & Metabolism and Division of Hematology & Oncology** | The University of Florida sees value in adopting PROMIS tools integrated within the Electronic Health Record (EHR) because of the widening adoption of PROs in medicine, their potential to increase clinical efficacy, and their potential use in research studies. All clinics at the University of Florida were new to electronic PRO collection, although several have previously used quality of life instruments. The EASI-PRO project site leader conducted outreach among a number of departments, such as Family Medicine and Internal Medicine. He was agnostic to condition but concentrated instead on selecting leaders who could partner effectively in piloting electronic PROs in the clinical setting. The University of Florida Endocrinology clinic and Adult Hematology & Oncology clinic are both forward-thinking groups with project goals of gathering data, understanding usage, furthering research, and improving the patient experience. These goals are well-aligned with administrative initiatives. In addition to demonstrating research and clinical relevance, the University of Florida clinics chosen are both ready to lead the project and willing to grapple with the necessary changes in workflow that will be required during implementation. Ultimately, pilot clinics were selected based on the presence of leaders with the skills and desire to drive the project forward. |
| **University of Illinois at Chicago (UIC) Family Medicine Clinic, Geriatric population** | The University of Illinois at Chicago (UIC) is new to electronic collection of PRO measures. The EASI-PRO project site leader reached out to a number of clinics. Clinical condition was not important in the pilot selection. Rather, the presence of an engaged and capable leader was considered a key criterion. PROs will be piloted in the Family Medicine Clinic geriatric population due to the presence of a clinician champion skilled in informatics and possessing the capability and willingness to try new technology. Project goals include gathering data, understanding usage, furthering research and improving the patient experience. Much of the momentum for introduction into the geriatric population specifically within Family Medicine stemmed from a UIC grant known as ENGAGE-IL, which is focused on the engagement of geriatric care for all, funded by the Health Resources and Services Administration (HRSA). The goals of ENGAGE-IL are well-aligned with broader UIC administrative initiatives. In addition to demonstrating research and clinical relevance, the UIC Family Medicine Clinic is prepared to undertake change management and to guide future clinical implementations by tracking benefits, drawbacks, and best practices. |

**Table B. Motivations of clinical staff and institutional leadership leading to implementation of PROs.** This table provides detail on motivations for implementing PROs. Importantly, this table illustrates the importance of mutual satisfaction of system-wide, institutional, and clinical goals through adoption of PRO instruments.

| **Institution and Clinic** | **Motivation for Implementing PROs** |
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| **University of Chicago Medical Center (UCMC) Department of Orthopaedic Surgery and Rehabilitation Services** | Orthopaedics seeks to implement PROs with a view to treatment monitoring in the clinic. The clinic anticipates benefits in additional post-operative success as a result of administering PROMIS instruments pre-operatively.  The UCMC Orthopaedic clinic has the goal of improving the patient experience and outcomes through enhanced data gathering and process improvements. These goals are well-aligned with administrative priorities. With the introduction of PROs, physicians and the interdisciplinary team expect to improve the patient experience. One desired benefit of the pilot University of Chicago PROs implementation is gaining a better understanding of the value of specific interventions to patients. It is hoped that identification of at-risk patients most in need of early intervention will lead to improved patient satisfaction, a core metric of interest to UCMC stakeholders. In addition, the Medical Center wishes to improve satisfaction through enhanced outreach from concerned clinicians and to provide timely appointments for patients who are not improving as expected. PROs will be collected for non-operative and pre-surgical patients to study patients’ functioning and quality of life. |
| **University of Florida Division of Endocrinology, Diabetes & Metabolism** | Patient-reported data is more relevant in some endocrine conditions than in others. It is especially important, for example, in obesity and diabetes to understand the conditions’ impact on the patient’s quality of life. Clinicians hope to use PRO measures to receive pertinent information, have the opportunity to notice changes, combine lifestyle data and medication adherence data, and construct a complete clinical picture for the benefit of patients. The Endocrinology Department expects to learn over time about the best deployment of PRO measures.  PROs are also considered highly useful for phenotypic data. Endocrinology clinic researchers have developed a computable phenotype with Type 1 and Type 2 diabetes, which allows clinicians to identify who has diabetes and of what type, understanding disease impact, differences by type, and effects of the newer treatment modalities on patients. Having a history of PRO data in an accessible and analyzable form is critical to moving forward with this initiative in the future.  From an institutional point of view, having PROs collected and available for analysis is a priority of the health system and part of the initiative known as OneFlorida. The University of Florida is concerned about the social determinants of health and about special population subsets. The University of Florida health system also encourages examination of outcomes rather than process. |
| **University of Florida Division of Hematology & Oncology** | There are two primary aims for PROs in oncology: symptom monitoring and early intervention for problems caused either by the cancer itself or by treatments related to cancer therapy. In addition, PROs would be extremely valuable in replacing or augmenting the cancer toxicity tool currently used in the clinic.  The Hematology & Oncology clinic expects a number of benefits from the use of PROs, including saving physician time though direct patient entry and by storing more accurate documentation in the EHR. In addition, PROs might positively affect quality of care by allowing clinicians to assess symptoms more accurately and apply treatments more consistently. Better and more reliable monitoring might reduce treatment toxicities and allow the physician to focus on those areas of most concern to the patient. Other benefits envisioned include treatment tracking and use in clinical trials. An advantage of PROs is that they encourage examination of outcomes rather than a focus on process measures.  Regulatory changes are on the horizon. It is of benefit at both the clinical and institutional levels to prepare for regulatory requirements. |
| **University of Illinois at Chicago (UIC) Family Medicine Clinic, Geriatric population** | Physicians are interested in using PROs for screening, especially screening of cognitive function. They are also interested in population health. In addition, clinicians are extremely focused on efficiency in their clinical practice. Much of the momentum for introduction of PROs into the geriatric population stems from a grant called ENGAGE-IL that is focused on geriatric care. Funded by the Health Resources and Services Administration (HRSA), ENGAGE-IL aims to improve the overall health and well-being of older adults. The ENGAGE-IL grant is focused on outcomes and screening, because clinicians are most motivated by the need to have practical tools that can help improve patient lives.  University of Illinois Health (UIHealth) is keenly interested in the social determinants of health and the clinical transformations of special populations. Concentrating first on the Englewood clinic in Chicago allows the institution to focus on socio-economic factors and provides a robust opportunity to investigate the social determinants of health that shape patients’ decisions.  Regulatory and external requirements for PROs are not currently in existence in the Family Medicine specialty. |

**Table C. Salient aspects of the implementation process.** This table illustrates some of the most important aspects of PRO implementation, including the composition of the implementation team, the information gathering process and time requirements, and funding sources. Differences highlight the variability of clinical implementation even when using a common planning process and demonstrate that no two planning processes are exactly alike.

| **Institution and Clinic** | **Component** | **Team, Process Description, Timing and Resources** |
| --- | --- | --- |
| **University of Chicago (UChicago)**  **Department of Orthopaedic Surgery and Rehabilitation Services** | **Team Overview** | Roles:  Executive sponsor in senior leadership  Medical informatics officer and EASI-PRO site leader through October, 2019  Clinician champion within Orthopaedics. In October, 2019, the clinician champion also assumed site leadership of the EASI-PRO project.  EHR specialist  Patient portal specialist  Vendor technical consultant  Northwestern University and Northwestern Medicine facilitation and consulting personnel  See Table D for full description of the team, including titles and roles of all members. |
| **Time, Tools, and Process** | Selection of pilot clinic began in roughly October, 2018. After Orthopaedics agreed to serve as the PRO pilot clinic, four months of weekly UChicago-internal meetings ensued, followed by bi-weekly meetings with email updates that are ongoing today.  The *PRO Planning Guide* was distributed and discussed in February of 2019. Weekly meetings with the EASI-PRO implementation planning consortium occurred February-June. During this time, the UChicago team used its decision log to record decisions that had been made or were being made and communicated through interviews and internal planning meetings (such as the decision to start only with PROMIS measures). Finally, decisions recorded in the decision log were written in narrative form as the University of Chicago Medical Center (UCMC) Orthopaedics implementation plan.  In early June, 2019, UCMC went live with a “soft launch,” in which PROs were available but unannounced. A summer University of Chicago undergraduate student continued to study workflow issues even after the launch, and ideal workflow continues to be examined. Final decisions concerning the ideal workflow will be made after a period of exploration and consideration. Work also continues on ideal data search and retrieval, both patient-by-patient and at the population level. |
| **Funding** | This research at the UCMC was supported, in part, by the EHR Access to Seamless Integration of PROMIS (EASI-PRO) grant and by UChicago’s local Clinical and Translational Science Award (CTSA) through the National Institutes of Health's National Center for Advancing Translational Sciences. See acknowledgements for additional detail.  The UCMC continues to support the work through allocation of faculty and staff time in the clinic and support provided by its EHR information technology team. Although EASI-PRO paid for the initial license for PROs, ongoing licensing will be covered by the institution. |
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| **University of Florida (UF) Division of Endocrinology, Diabetes & Metabolism and University of Florida Division of Hematology & Oncology** | **Team Overview** | Roles:  Executive sponsor in senior leadership  Two medical informaticians, one of whom is the UF EASI-PRO site leader, worked with a team of research coordinators and project managers  One clinician champion within each clinic  EHR specialist  Patient portal specialist  Northwestern University and Northwestern Medicine facilitation and consulting personnel  See Table D for full description of the team, including titles and roles of all members. |
| **Time, Tools, and Process** | The UF medical center encountered a significant legal barrier at the beginning of the PRO planning process. The EASI-PRO site leader worked with senior officials at the institution to resolve the issue, which was cleared in Spring of 2019. While unable to officially begin implementation due to the legal barrier, UF undertook multiple planning steps, including identifying two pilot clinics, interviewing stakeholders, making many preliminary decisions, and beginning work on draft plans.  The *PRO Planning Guide* was distributed and discussed in February of 2019. Weekly meetings with the EASI-PRO implementation planning consortium occurred February-June. Results of all internal planning meetings and interviews throughout the project were recorded in the decision logs (one for each clinic). The information in each clinic’s decision log was incorporated into 1) an implementation plan for Endocrinology and 2) an implementation plan for Hematology & Oncology. Some questions remain for both clinics that are highlighted in each of their respective plans; therefore, completion of implementation plans is still in progress. For example, Endocrinology has chosen the PROMIS measures it will use, but Hematology & Oncology is still in the decision-making process. A large meeting was held with both Endocrinology and Hematology & Oncology in December, 2019. UF informaticians and team members continue to study optimal workflow. The EHR team is now working actively with both clinics to implement PROs technically within its patient portal using the planning information gathered during the PRO planning process. Two additional UF clinics have recently expressed interest in implementing PROs. |
| **Funding** | This research at the University of Florida was supported, in part, by the EHR Access to Seamless Integration of PROMIS (EASI-PRO) grant and by UF’s local Clinical and Translational Science Award (CTSA) through the National Institutes of Health's National Center for Advancing Translational Sciences. See acknowledgements for additional detail.  The University of Florida Medical Center continues to support the work through allocation of faculty and staff time in the clinic and in its EHR IT team and future license payments.  This project was also supported by the UF Cancer Informatics and eHealth Core. |
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| **University of Illinois at Chicago (UIC) Family Medicine Clinic, Geriatric population** | **Team Overview** | Roles:  Executive sponsor in senior leadership who is also the EASI-PRO site leader  Interim Head of Family Medicine consulting on research and quality  Physician/informatician and another physician at a separate location of Family Medicine. Both function as clinician champions for their respective locations.  EHR specialists will be added to the team when appropriate.  Northwestern University and Northwestern Medicine facilitation and consulting personnel  See Table D for full description of the team, including titles and roles of all members. |
| **Time, Tools, and Process** | Selection of the pilot clinic began in roughly October, 2018. The EASI-PRO site leader approached his colleagues in Family Medicine. The project had a number of synergies with active projects within the geriatric population and dovetailed with clinical informatics efforts in Family Medicine.  As the University of Illinois at Chicago was deciding to integrate PROs into its EHR, the University of Illinois Health Center made the decision to select a new EHR vendor. Consequently, the new Epic system will go live in May, 2020, after which the Epic PROMIS app will be installed and technical implementation of PROs can begin.  Because PRO planning can proceed before technical implementation, Family Medicine participated in the EASI-PRO implementation planning process to prepare to go live with PROs as soon as feasible following implementation of its new EHR. Internal strategy and planning meetings were held on a monthly basis.  The *PRO Planning Guide* was distributed and discussed in February of 2019. Weekly meetings with the EASI-PRO implementation planning project occurred February-June. The results of all internal meetings and interviews during the planning process were recorded in the University of Illinois Family Medicine decision log. In the Summer of 2019, the information in the decision log was incorporated into an implementation plan for the geriatric population within Family Medicine. The clinician champion/informatics leader further refined the plan, particularly in areas such as planned workflow, training, and evaluation, making it ready to share with everyone on the team and with technical personnel. |
| **Funding** | This research at the University of Illinois at Chicago was supported, in part, by the EHR Access to Seamless Integration of PROMIS (EASI-PRO) grant and by UIC’s local Clinical and Translational Science Award (CTSA) through the National Institutes of Health's National Center for Advancing Translational Sciences. See acknowledgements for additional detail.  The University of Illinois Health Center continues to support the work through allocation of faculty and staff time in the clinic and will allocate resources within its EHR information technology team. Although EASI-PRO paid for the initial license for PROs, ongoing licensing will be covered by the institution. |

**Table D. Detailed composition and individual roles within implementation teams at each of the three universities undertaking pilot implementations.** Universities implementing PROs formed teams comprised of senior leaders, clinician champions, and informaticians, each with important and distinct roles and responsibilities. All team members were chosen by the EASI-PRO site leader at each institution. Some team members were involved in direct implementation, while others had roles that supported charge management activities and drove decision making. Northwestern University and Northwestern Medicine consultants and an informatics research assistant joined with site teams to provide staffing and facilitation. Formal titles are italicized.

| **Institution and Clinic** | **Roles** | **Titles and Activities** |
| --- | --- | --- |
| **University of Chicago (UChicago)**  **Department of Orthopaedic Surgery and Rehabilitation Services** | **Institutional** | The *Chief Quality and Innovation Officer*, who also serves as the *Vice President for Healthcare Delivery Science*, functioned as the executive sponsor of the PRO initiative, providing institutional support. This officer oversees institutional resources that utilize the Electronic Health Record (EHR) and prioritizes new features. The EASI-PRO project fit well within the University of Chicago Medical Center (UCMC) framework for new initiatives. Although UCMC is new to PROs, the institution welcomed this initiative based on prior knowledge of PRO goals and ideals. The support of the *Chief Quality and Innovation Officer* was critical in providing institutional backing to the EASI-PRO initiative.  The University of Chicago *Chief Medical Informatics Officer* functioned as the EASI-PRO project site leader during the time of the implementation planning project. The *Chief Medical Informatics Officer* had no direct role in the clinic but based on his knowledge of the value of electronic PROs, led the implementation planning project until October, 2019. His activities included locating an appropriate pilot clinic, selecting and liaising with the executive sponsor, providing informatics expertise, and providing a bridge between the institutional, clinical, and technical worlds from his knowledge and expertise in all three realms.  External resources as part of this EASI-PRO project: Informatics research assistant and Northwestern University and Northwestern Medicine facilitation and consulting personnel. |
| **Clinical** | A surgeon within the Orthopaedic Department (*Assistant Professor of Orthopedic Surgery, Medical Director of Orthopaedic Surgery Ambulatory Operations, and Medical Director of Informatics*), served as the clinician champion for the initial University of Chicago PROs implementation. She was responsible for identifying fellow providers to serve as team members for implementation and for advocating with leadership for resources and support. She also took an active role of “process owner” within the clinic and is leading a multi-disciplinary team that will utilize electronic PROs in the clinic. The clinician champion was aware of the value of PROs due to familiarity with the research literature and wished to implement electronic PROs in the Orthopaedic clinic. In October, 2019, she assumed site leadership of the EASI-PRO project, succeeding the *Chief Medical Informatics Officer*. |
| **Technical** | PROs at the University of Chicago are fully integrated into the EHR by means of an Epic vendor application. Technical resources are available to assess the impact of workflow design on existing technical infrastructure. In addition, significant effort was required to configure and link in the app, which is now fully implemented and running successfully. The *Director of Clinical Research* (an EHR staff member) managed the technical implementation of the EHR app. Configuration of the app itself was outsourced to a consultant from Epic’s “Boost” consulting pool. A technical document based on this consulting work was constructed and distributed to others in the consortium. |
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| **University of Florida (UF) Division of Endocrinology, Diabetes & Metabolism and University of Florida Division of Hematology & Oncology** | **Institutional** | This project fits within the University of Florida framework for new initiatives. The executive sponsor of this PRO initiative is University of Florida *Pediatrics Vice Chairman for Clinical Affairs*, who also serves as the University of Florida *Assistant Dean for Medical Informatics* and is a clinical professor. In his informatics role, the *Dean for Medical Informatics* oversees any change or improvement in the EHR and any modification or new functionality incorporated into the EHR. The University of Florida is knowledgeable about PROs and welcomed this pilot project as a means of gaining experience.  The primary lead for the implementation project and site leader of the EASI-PRO project is an *Associate Professor in the Department of Health Outcomes & Biomedical Informatics* and is *Director of Cancer Informatics & eHealth Core University of Florida Health Cancer Center*. Co-lead on the EASI-PRO project at the University of Florida is an *Assistant Professor in the Department of Health Outcomes & Biomedical Informatics* in the College of Medicine at University of Florida. The EASI-PRO leader is familiar with the University of Florida Health System and was able to identify an appropriate executive sponsor.  The *Director of Cancer Informatics* and his associate in the Department of Health Outcomes direct a team of research coordinators and project managers who also worked on the Implementation Planning Process. The Director is knowledgeable about electronic PROs and their role in health information.  In addition to informatics resources, the University of Florida *Chief Data Officer for the University of Florida Health & Health Sciences Center* played an important role in resolving a legal question that was a barrier during project implementation. Others who helped resolve this difficult barrier were a *Senior Vice President* and the *Chair of the Health Outcomes and Biomedical Informatics Department*.  External resources as part of this EASI-PRO project: Informatics research assistant and Northwestern University and Northwestern Medicine facilitation and consulting personnel. |
| **Clinical** | Two clinics are currently involved in PRO planning at the University of Florida, Endocrinology and Hematology & Oncology:  **Endocrinology:**  An Endocrinology specialist (*Medical Director, Inpatient Diabetes and Endocrine Services, Shands Hospital*) is the clinician champion for the initial University of Florida PROs implementation. He is responsible for identifying fellow providers to serve as team members for implementation and advocating with leadership for resources and support. He has also taken the role of “process owner” within the clinic and is leading a multi-disciplinary team (*Assistant and Associate professors*) that will utilize electronic PROs in the clinic. He has not previously used PROs, but is familiar with their expected benefits.  **Hematology & Oncology:**  A Colorectal Cancer specialist (*Professor, Director of the Gastrointestinal Oncology Program, Director of the Experimental Therapeutics Incubator, Associate Director for Clinical Research at the UF Department of Medicine and UF Health Cancer Center*) is the clinician champion for the initial University of Florida PROs implementation in the Adult Hematology & Oncology clinic. He is responsible for identifying fellow providers to serve as team members for implementation and advocating with leadership for resources and support. He, along with key administrative support personnel, is functioning as “process owner” ­­within the Adult Hematology & Oncology clinic. He has not previously used electronic PROs, but is familiar with their expected benefits.  Other clinical users within Hematology & Oncology: Multiple physicians and multi-disciplinary team members in the Adult Hematology & Oncology clinic will be interested and involved in using PROs. In addition to physicians, mid-level providers, nurses, social workers, infusion room nurses, research nurses and research assistants, and potentially even pharmacists may access results. |
|  | **Technical** | PROs at the University of Florida are being integrated into the EHR by means of an Epic vendor application. Technical resources, including a technician from UF Health IT and the *Director of MyChart*, are playing critical roles in assessing the impact of workflow design on existing technical infrastructure. In addition, significant effort is expected to be needed to configure and link in the vendor app. |
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| **University of Illinois at Chicago (UIC) Family Medicine Clinic, Geriatric population** | **Institutional** | This project fits within the University of Illinois at Chicago (UIC) framework for new initiatives. The executive sponsor of this PRO initiative is the *Assistant Vice Chancellor for Health Affairs; Chief Health Information Officer, University of Illinois Hospital & Clinics; Associate Professor, Clinical Family Medicine*. He is part of the hospital and clinic leadership for the UIHealth. He is the site leader for the EASI-PRO project at the University of Illinois and very knowledgeable about the benefits of PROs. The institution is seeking to gain experience with utilization of PRO measures.  Other persons also played institutional roles: The *Professor and Director of Graduate Studies, PhD in Biomedical and Health Informatics, Biomedical and Health Information Sciences* served as an information resource and content expert, focusing attention on the sociotechnical implications of change management. Another informatician (*Associate Professor, Associate Chief Health Information Officer, and Acting Associate Vice Chancellor for Research*) supported change by encouraging adoption and working through complex EHR implementation scheduling. A physician (*Interim Department Head University of Illinois College of Medicine, Director of Research and Quality Improvement*) is advising on best practices, coordinating research (as the Project Co-Director for the ENGAGE-IL grant at UIC), and provided mentorship on geriatric research methodology.  External resources as part of this EASI-PRO project: Informatics research assistant and Northwestern University and Northwestern Medicine facilitation and consulting personnel. |
| **Clinical** | The *Director of Primary Care Clinical Informatics for UIHealth at the University of Illinois College of Medicine* (also *Assistant Professor of Family Medicine*) functions as the clinician champion for PRO implementation. In addition to his clinical practice, much of the Clinical Informatics Director’s role focuses on operational work on efficiency and delivering upon institutional goals. He works closely with the *Assistant Vice Chancellor for Health Affairs*. He has not previously used electronic PROs, but is familiar with their expected benefits.  The initial pilot for the Family Medicine PRO integration will be at the Mile Square Health Center in the south side Chicago neighborhood of Englewood. The clinician champion within that facility is a family practice physician (*Assistant Professor of Clinical Family Medicine University of Illinois College of Medicine*). |
| **Technical** | No EHR support person is yet dedicated to PRO implementation, although the team has been in brief talks with the *Director of IS Applications*. |

**Table E. Translation of characteristics of pilot clinics, such as target patient population and clinic size, into PRO inclusion and exclusion criteria.** This table illustrates the translation of clinical characteristics into PRO decisions. In this case, facts about the clinics’ target populations and number of patients/encounters were interpreted as appropriate to create PRO target population inclusion and exclusion criteria.

| **Institution and Clinic** | **Population** | **Target Population, Numbers, and Inclusion and Exclusion Criteria** |
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| **University of Chicago Medical Center (UCMC) Department of Orthopaedic Surgery and Rehabilitation Services** | **Target Patient Population** | Two Chicago-area locales affiliated with the University of Chicago Medical Center (UCMC) are targeted to use the platform. They are located in Orland Park and the main UCMC facility in Hyde Park. Targeted groups are new patients and patients scheduled for new surgery. |
| **Number of patient visits** | Estimated volume of 300-500 patients per year when all physicians’ patients are included. |
| **PRO inclusion and exclusion criteria** | (**NOTE**: Inclusion and exclusion criteria will begin after an initial trial, during which only patients of three selected surgeons will complete PROs.)  Including all English-speaking adults aged 18 and up with any appointment type or scheduled surgery.  Excluding patients under 18 years of age. Excluding patients flagged in Epic as needing a translator.  Advance patient portal enrollment is not required but patients will be enrolled before completing PROs. |
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| **University of Florida Division of**  **Endocrinology, Diabetes & Metabolism** | **Target Patient Population** | Initial PRO requests will be made of patients in the bariatric practice. By focusing on particular disease domains, the clinic can test usefulness and relevance in various endocrine conditions. After bariatric patients, the clinic will add thyroid patients, who often have a perceived lower quality of life. |
| **Number of patient visits** | Initial patients will come from the bariatric practice, 15-20 weekly. Eventually, PROs would be part of the entire University of Florida Diabetes and Obesity practice. Volume would eventually be in the thousands annually for patients with diabetes. The clinician champion himself sees approximately 40 outpatients a week. |
| **PRO inclusion and exclusion criteria** | (**NOTE**: Inclusion and exclusion criteria will begin after an initial trial, during which only bariatric patients will complete PROs.)  Including all new and returning English speaking, adult patients with chief complaints of diabetes or thyroid diseases of any appointment type with participating physicians.  Excluding patients under 18 years of age. Excluding patients flagged in Epic as needing a translator. Excluding patients that are unable to complete PROs due to disability. (Eventually, may modify disability policy.)  Patients will be enrolled in patient portal before completing PROs. |
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| **University of Florida Division of**  **Hematology & Oncology** | **Target Patient Population** | Patients having solid cancers such as breast cancer, colon cancer, lung cancer, and prostate cancer. The clinic will *not* administer PROs initially to vulnerable populations such as prisoners or pregnant women. |
| **Number of patient visits** | After working out logistics with physicians specializing in colorectal oncology, the clinic will open PROs to the entire solid tumor practice. For the pilot, PROs will be requested from 20-100 patients per week. Eventually, it is anticipated that 100-150 solid tumor patients per week will use PROs in the Hematology & Oncology clinic. The entire Hematology & Oncology practice sees 200-300 patients per week. |
| **PRO inclusion and exclusion criteria** | (**NOTE**: Inclusion and exclusion criteria will begin after an initial trial, during which only patients of physicians specializing in colorectal cancer will complete PROs.)  Including all new and returning English speaking, adult patients with chief complaints of solid tumor of any appointment type with participating doctors.  Excluding patients flagged in Epic as requiring a translator. Excluding patients under 18 years old. Excluding patients unable to complete PROs due to cognitive disability. (Physical disability will not impact eligibility.)  Patients will be enrolled in patient portal before completing PROs. |
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| **University of Illinois at Chicago (UIC) Family Medicine Clinic, Geriatric population** | **Target Patient Population** | The initial pilot for the Family Medicine PRO integration will be at the Mile Square Health Center in the south side Chicago neighborhood of Englewood, followed closely by the University Village clinic, also in Chicago. At some point in the future, PROs are anticipated to be part of the entire UIHealth ecosystem. |
| **Number of patient visits** | For the pilot, PROs will be requested from approximately 10 new/annual wellness patients at the Mile Square clinic and 10 new/annual at the University Village location on a weekly basis. In the most recent year, Family Medicine saw approximately 2,600 geriatric patient encounters with 700 unique patients. Family Medicine as a whole serves approximately 33,000 patients with 140,000 encounters annually. |
| **PRO inclusion and exclusion criteria** | (**NOTE**: Inclusion and exclusion criteria will begin after an initial trial, during which only patients of a few physicians will complete PROs.)  Including all new and returning English speaking, adult patients over the age of 65 with appointments.  Excluding patients flagged in Epic as requiring a translator. Excluding patients under 65 years of age.  Patients will be enrolled in patient portal before completing PROs. |

1. **Bernstein DN, Kelly M, Houck JR, Ketz JP, Flemister AS, DiGiovanni BF, Baumhauer JF, Oh I.** PROMIS Pain Interference Is Superior vs Numeric Pain Rating Scale for Pain Assessment in Foot and Ankle Patients. Foot & Ankle International 2018; **40:** 2. (<https://doi.org/10.1177/1071100718803314>) [↑](#endnote-ref-1)