



DukeHealth

Management & Leadership Pathway for Residents

The Management and Leadership Pathway for Residents (MLPR) provides residents with the knowledge and skills essential to bridge clinical practice and management and become skillful and effective physician executives.

Handbook & Course Catalog
2020-21

Management and Leadership Pathway for Residents

Trainees will achieve MLPR goals through thoughtful collaboration among existing post-graduate training programs and the management structure of Duke Health by:

- completing requirements for clinical practice and ABMS board eligibility (and where applicable, specialty board certification), and
- participating in project-driven modules designed to achieve applicable solutions to high priority issues within his/her clinical Department and Duke Health

The MLPR experience is comprised of four components: didactic instruction, mentorship, a longitudinal project, and management rotations.

Didactic Instruction

The didactic curriculum consists of coursework at the Fuqua School of Business. While the exact course offerings will be dependent on the schedule at the Fuqua School, most trainees will participate in a healthcare immersion experience (often referred to as “boot camp”), a course in healthcare strategy, and a seminars course. Most coursework will be during MLPR rotations to minimize disruption to clinical rotations. Additional seminars, lectures, and roundtable discussions will take place during the MLPR experience. Many of these activities will center around initiatives within DUHS focused on innovation, physician executive development, and leadership.

Mentorship

MLPR trainees will be assigned to a mentor who is a senior leader in the Duke University Health System. Ideally, mentors will be from a specialty different from that of the trainee. Mentor assignment will be based on each trainee’s experience and future career goals. Mentors will assist the resident with navigating the Duke system, identifying professional opportunities and selecting a longitudinal project of high-priority to DUHS and high-interest to the resident. Each trainee will have the responsibility of establishing a schedule to meet with his/her mentor. Ideally, each trainee should meet with his/her mentor quarterly.

Longitudinal Project

MLPR trainees will participate in a longitudinal project. The longitudinal project should be similar to a thesis-level project that demonstrates aptitude across multiple management-level domains. The project should be worthy of wider distribution beyond Duke University Health System and may be combined with other projects in the MLPR.

Management Rotations

Management rotations are the central component of the MLPR. Rotations are typically 3 months, during which trainees will be expected to work within the unit “full-time” attending meetings and pursuing other relevant activities. Depending on availability of clinical opportunities and management experiences, the 3-month rotation may be non-contiguous.

Throughout the combined training pathway, clinical rotations and management modules will align to the extent possible. For example, a trainee may participate in a clinical rotation in nephrology and then complete a management rotation aimed at increasing outpatient dialysis services in the surrounding area. Trainees will also be required to undertake at least one to two modules under direct guidance of their primary clinical department. By utilizing his/her business acumen and clinical background, the resident will be expected to bring considerable value to the rotation site. The MLPR program has earned a strong reputation due to the organizational contributions trainees provide during their rotational experiences.

While each rotation will differ in structure based on individual interest and institutional initiatives, the basic format includes an initial meeting with the rotation director to review goals and objectives and overview of the unit/department and its current priorities. A brief shadow period may be appropriate for the trainee to meet key team members and understand the culture and cadence of each rotation site. The trainee may also tour relevant locations during this period. In this initial period, the MLPR resident will work with the director to identify areas of focus during the rotation, including the identification of a project(s).

Immersion

Trainees are expected to work within the unit “full-time,” including attending meetings and other relevant activities. Given that administrative medicine is constantly in flux, trainees will be expected to keep a flexible schedule and challenging workload. Priority must be given to clinical responsibilities and duty hour rules. At the initial meeting with the rotation director, the trainee should be prepared to address his/her clinical requirements during the rotation. The assistant director of the MLPR program will attend this initial session as appropriate.

Instruction

Throughout the Pathway, the trainee will participate in didactic programs; this may include sessions specifically tailored to the individual’s needs.

Results

Trainees will complete one or more projects during the rotation. Given the relatively short time each rotation involves, the project will likely involve work after the rotation has formally ended. This “spill over” is intentional, allowing the trainee to stay connected with those with whom he/she has worked and providing for other opportunities for synergy within Duke Health.

Evaluation

Trainees will receive monthly evaluations from individuals with whom they worked during their MLPR rotation. MLPR residents are asked to evaluate rotation directors and rotations in general. Every three months, trainees will complete a self-evaluation based on attributes of physician executives and every six months a broader self-reflection evaluation.

CORE CURRICULUM

Health System Management and Operations

Course # SMO

Some of the keys to successfully managing a complex organization include understanding the ways in which individual components interact with each other, how to build upon strengths of each component and how to best leverage appropriate standardization across the system. Focusing on the multifaceted relationships between various parts of Duke Health helps to build greater insight into future needs of the organization and the best approaches to address system-wide needs. This rotation will impart trainees with the knowledge to create efficiency on an organizational level by properly aligning multiple elements within the system.

Rotation Director: Varies

Objectives:

- Discuss organizational structure and alignment in hospital, ambulatory and system settings
- Maximize organizational effectiveness through communication with administration, physicians, nursing, and non-clinical support staff
- Deliver value to the customer across all dimensions of clinical and operational quality, workforce engagement, customer engagement and finances
- Identify business and strategic planning processes and goals
- Align work plans to manage short- and long-term planning goals
- Describe the role and impact of national excellence criteria, accrediting bodies and regulatory agencies that govern hospital operations
- Observe general management and governance philosophies, practices and policies
- Explain the inter-relationships among different processes and systems at a micro (departments or individual process) and macro (hospital or multi-entity system) level

Location: Varies

Trainee Roles and Responsibilities:

- Attend key operational and quality meetings

- Deliver project recommendations and system changes for assigned projects
- Present recommendations to multi-disciplinary teams and with senior leadership

Sample Projects:

- Develop and implement an effective physician on-boarding process to effectively orient, integrate and educate new faculty on Duke Values and goals, and quickly, fully deploy their skills or specialties.
- Assist in the development of cardiovascular services 2020 strategic plan.
- Outline and document a comprehensive quality infrastructure and plan for a multi-hospital system including inpatient and outpatient components.
- Develop a financial and operational business plan outlining the preferred mechanism to manage ambulatory monitoring services including a full review of services currently outsourced at Duke.
- Develop a communication plan for disseminating information, results and news across the system through various mechanisms and develop/deliver presentations with key messaging to teams across the organization.
- Define accountable care organizations (ACOs) and how Duke CV Services should best implement plans for ACOs to respond to health care reform.

Criteria of a Successful Rotation:

- Immersion in and understanding of the challenges and use of effective change methods within a complex system
- Ability to create and communicate tactical and business plans to address operational, strategic, and quality goals
- Ability to align operational departments, measures, goals, tactics, or priorities with overall organizational goals

Financial Management and Planning

Course # FMP

Physician executives must be able to use the latest quantitative techniques and strategies to measure and improve a health system's value and performance. Trainees may wish to focus on a specific financial function such as clinical revenue management. The trainee may choose

to focus on the finance as it relates to his/her clinic specialty. This rotation will impart the knowledge, behaviors, and confidence to meet the challenges of today's real world, real-time healthcare economy.

Trainees will spend the first one-to-two weeks of the rotation reviewing the full breadth of financial issues faced by a health system. This will include meeting with the divisional CFOs at Duke University Hospital, Duke Regional Hospital and Duke Raleigh Hospital. Additional opportunities to meet with key individuals in the financial arm of the School of Medicine and Private Diagnostic Clinic will also be reviewed during this initial period.

Rotation Director: Stuart Smith, Associate Vice President, DUHS

Objectives:

- Describe the interplay of key administrative stakeholders roles and responsibilities within Duke University Health System's finance team
- Demonstrate greater knowledge of the role of providers' decision making in hospital finance
- Explore active projects bridging clinical training and financial skill sets applicable to a specific medical specialty or financial discipline

Location: Varies

Trainee Roles and Responsibilities:

- Participate in conference and budget meetings
- Rotate through four blocks in relevant core areas:
 - Reimbursement
 - Managed care contracting
 - Patient revenue management
 - Financial Planning and Analysis

Sample Projects:

- Assist in the development of a business plan for a capital project over \$1 million. DUHS Policy requires that all capital business plans with cash outlays over \$1 million be documented with a well-developed, thoughtful business plan that succinctly describes the goals of the project, its expected impact on patient care and the financial impact over the project's useful life. This plan is then presented to the DUHS Executive Management

Committee (EMC) for approval and funding. Recent examples include the Duke Cancer Center (\$222 million) now completed, and the Duke Medicine Pavilion (\$559 million). Smaller capital project examples include the purchase of CT Scanners, MRIs and Linear Accelerators.

- Assist in the development of the annual Financial Plan. The DUHS annual Financial Plan is one of the primary mechanisms used to manage the Health System. The Financial Plan is developed and compiled in the January to May timeframe and is presented for approval at the June meetings of the EMC and DUHS' Board of Directors. The Financial Planning process includes developing detailed volume projects by Clinical Business Unit along with the associated expense projections and operating income. Detailed plans are developed for each DUHS entity (e.g. Duke University Hospital, Duke Regional Hospital, Duke Raleigh Hospital, etc.). The results of the individual units are then consolidated. The final product is a Financial Plan for the fiscal year that contains detailed analysis of our market, assumptions and key statistics, the detailed capital plan, selected sensitivities and financial projections for the forward looking five-year period.
- Assist in the financial review and negotiation of a significant DUHS contract. DUHS contracts out several functions such as food services and environmental services that require expertise not normally associated with a major teaching hospital. The negotiation of these contracts requires thoughtful analysis of the key critical components of the work to be performed along with detailed financial modeling of the impact to DUHS. These renegotiations require a collaborative effort between Procurement, Hospital Management, Finance and Legal Counsel.
- Other projects may be available based on the specific interests of the participant and current projects that are underway within DUHS Finance. The design of these projects can be developed through discussion with the Rotation Director and Senior Management of DUHS Finance.

Criteria of a Successful Rotation:

- Complete minimum of 1 project
- Monthly resident lectures on hospital finance

SELECTIVE CURRICULUM

Health IT, Analytics, and Data Science

Course # HIT



From population level down to point of care, physician executives need to understand and utilize data to make important decisions that impact care delivery. The widespread adoption of electronic medical records, access to claims data through new payer relationships, and emergence of new types of data (i.e., social, consumer, wearable, telehealth) have created a vast sea of structured and unstructured data. There are tremendous opportunities and challenges to harnessing this wealth of data by using analytics and informatics to improve care for individual patients and populations.

This 3-month rotation aims to expose trainees to data science, analytics, and informatics at Duke Health. Based on individual level of interest, trainees can gain exposure to the latest strategies to aggregate, capture, analyze, and leverage data to drive quality improvement, operational efficiency, redesign care, and population health. Areas of focus might include design, development, implementation and/or evaluation of:

- Health IT tools within MaestroCare
- Analytic and visualization tools used for population health management
- Predictive models
- Patient engagement tools

The trainee may choose to focus on the data science, analytics, and informatics as it relates to his/her clinical specialty. This 3-month rotation will impart the knowledge, behaviors, and confidence to meet the challenges of today's real world, real-time healthcare system.

Trainees will spend the first 1-2 weeks of the rotation gaining exposure to the full breadth of data science, analytics, and informatics issues faced by a health system. This exposure includes meeting with the following Duke leaders:

- Chief Information Officer (Jeff Ferranti)
- Chief Health Information Officer (Eric Poon)

- Director of IT services for the Population health Management Office and Analytics Center for Excellence (Mary Schilder)
- Chief Digital Strategy Officer (Matt Roman)
- Associate Director of the Mobile App Gateway (Katie McMillan)
- Associate Chief Medical Information Officer (Genie McPeck-Hinz)
- Duke Forge Co-Director (Erich Huang)
- Duke Forge Medical Director for Health Data Science (Azalea Kim, MLPR alumna)
- Chief of Digital Health and Strategy (Joy Bhosai, MLPR Alumna)

There are additional opportunities to meet with key individuals in DHTS, PHMO IT, Duke Forge, and DIHI based on the trainee's proposed project for the rotation and interests. During weeks 3-4, trainees will have the opportunity to complete a self-guided study of the physician builder curriculum for Epic and/or the Duke +DS Coursera course that provides an introduction to machine learning.

Rotation Director: Jeff Ferranti, MD, MS, Chief Information Officer, Vice President for Medical Informatics

Objectives:

- Describe the interplay of key administrative stakeholders roles and responsibilities within the health information technology, analytics, and health data science space
- Demonstrate greater knowledge of the role of data and technology to support decision makers at various levels of Duke Health
- Explore active projects bridging clinical training and skills developed in health IT, analytics, and data science to a specific medical specialty or business "use case"

Location: Varies

Trainee Roles and Responsibilities:

- Attend relevant conferences and meetings
 - Pop Health IT steering committee (once a month)
 - MaestroCare Physician Champions meeting (TBD)
 - ACE: Predictive Model Stakeholder meeting (TBD)
 - Duke Forge: Crucible meetings (weekly)
 - Duke Forge demonstration showcases and other convening meetings (TBD)
- Completion of self-guided study of the Epic Physician Builder or +DS curriculum
- Based on trainee interests, he/she may:

- Join an existing workstream and team to support the development of a data science and/or analytics output that addresses a specific business use case for the Duke Health System.
- Develop his/her own data science and/or analytics output proposal and workplan with the intention to move forward in its development

Sample Projects:

- Develop provider engagement materials regarding health IT tools and solutions in conjunction with MaestroCare physician champions
- Create a workflow for the implementation and evaluation of a new risk prediction model
- Design an evaluation plan (both quantitative and qualitative) on the impact of a technology-based intervention under development
- Complete an evaluation (both quantitative and qualitative) on the impact of a recently-deployed technology-based intervention
- Create a complete proposal for a new data science or analytic tool to meet an unmet business or quality improvement need during the 3-month rotation, with the intention to execute on this plan during remainder of trainee's time on MLPR

Criteria of a Successful Rotation:

- Complete minimum of 1 project
- Attendance at meetings and conferences

Global Strategy, Innovation, and Business Development

Course #GSD

Academic healthcare organizations, including Duke Health, are expanding their global presence. This rotation will focus on business development in a global context, including working with a variety of international partners that work in collaboration with Duke Health. The focus of this experience will primarily center on building and strengthening partnerships with our international team through careful analysis of our network of innovation partners, government and industry stakeholders, and policy thought leaders.

This rotation will provide trainees with experiences in working with health leaders across various private and public sectors. The Global Health Innovation Center provides each trainee with experiences in working with a gamut of stakeholders, from experience working with grassroots innovation partners, governmental organizations such as USAID representatives,

and large pharmaceutical companies. This rotation will prepare trainees to work with global agencies on topics such as innovation scouting, implementation, policy analysis, and global initiatives that address access to care for low and middle-income countries.

Rotation Director: Krishna Udayakumar, MD, MBA, Director, Global Health Innovation Center

Objectives:

- Evaluate global opportunities, policy implementation, and strategic partnerships for innovations on global settings.
- Discuss trends in globalization and their impact locally and globally on healthcare organizations.
- Facilitate and help advance global partnerships to expand the reach of innovations in health care delivery, hospital management, translational, and clinical research.
- Build relationships with global entrepreneurs across academia and industry in order to catalyze pathways for innovators to scale their solutions globally.
- Participate in ongoing global strategic planning and business development activities.

Location: American Tobacco Campus

Trainee Roles and Responsibilities:

- Participate in regular meetings with Duke Health senior leadership related to global strategy and business development.
- Develop financial models, business plans, market analysis, and related documents to support global business development activities.
- Present analyses and recommendations to leadership.

Sample Projects:

- Develop business and financial models for a web-based medical education and training portal that provides access to diverse content from Duke in the US and Duke-NUS GMS in Singapore.
- Perform market analysis to define competitive landscape for healthcare consulting services across the Middle East.
- Develop term sheet for potential research collaboration in cell therapy with private sector partner in China.
- Work with selected innovators to evaluate and develop business strategies and collaborations that can be used to scale their reach and access to specific populations in need.

- Propose healthcare models that can be scaled regionally, which may include cross border implementation. This would incorporate policy work and analysis of stakeholder considerations.
- Create avenues to develop sustainable business models that cultivate investment from various private and public sector partnerships

Criteria of a Successful Rotation:

- High quality work product (e.g., market report, business plan, term sheet)
- Ability to clearly articulate Duke Health's global strategy and make recommendations regarding potential collaborations.
- Strong evaluations from team members.

Patient Quality Improvement and Safety

Course # PSQ

Local and national trends place tremendous emphasis on continuous quality improvement. The combined business and clinical skill sets expected of trainees provide excellent tools to address this crucial topic. After completing this rotation, the resident will be able to focus on developing innovative and rapidly deployable ideas to improve the quality of clinical care within a healthcare system and disseminating these ideas across other healthcare organizations.

Trainees will rotate through the various organizational patient safety and quality committees including but not limited to medication safety, quality oversight, GME patient safety and quality council, patient family advisory councils, and others. This includes an opportunity to focus on one specific content area and/or to meet with individuals working on these initiatives throughout various levels of the Duke Health System.

Rotation Director: Jon Bae, MD, Associate Chief Medical Officer for Clinical Quality and Patient Safety, DUHS

Objectives:

- Explain Duke Health's priorities in patient safety and quality
- Describe how quality improvement principles and high reliability organizations can inform best practices in healthcare
- Discuss the importance of culture in delivering safe and reliable care

- Exhibit leader attributes that lead to a safe culture

Location: Varies

Trainee Roles and Responsibilities:

- Attend board/committee meetings
- Participate in quality and safety activities and initiatives throughout the health system and at various levels within Duke University Hospital (Patient Safety Walk rounds, Safe Choices workshop, Root Cause Analysis)
- Complete basic QI training courses (if schedule permits)
- Deliver project recommendations and system changes for assigned projects
- Present recommendations to multi-disciplinary teams and with senior leadership

Sample Projects:

- Work with institutional GME leaders to advance a patient safety and quality campaign to house staff.
- Design a plan and implementation strategy to connect and align Department and Institution level efforts at PSQ.
- Design a plan to enhance physician engagement in performance improvement activities.
- Develop a strategic plan to implement Just Culture principles in physician training

Criteria of a Successful Rotation:

- Immersion in and understanding of both the challenges and use of effective change methods within a complex system
- Ability to create and communicate plans with respect to quality and safety
- Ability to align safety and quality priorities to an organizational mission and vision
- Demonstration of leader attributes to support a safe culture

Clinical Service Enterprise Management

Course # CSE

Physician services are a key component of healthcare delivery. Recognizing opportunities to expand and best fit those services to meet demand is crucial to the viability of a healthcare organization. This rotation will impart an understanding of how to grow and modify services in the midst of changing demographics, competitive reimbursement environments, and fluid institutional priorities.

Rotation Director: David Attarian, MD, Professor of Orthopedic Surgery, PDC Chief Medical Officer

Objectives:

- Describe the complexities of managing a for-profit, multi-specialty, faculty practice and how priorities are managed in a multifaceted enterprise.
- Explain the competing demands placed on physicians in an academic medical setting and the impact they have on clinical practice.
- Describe the performance metrics attributable to a faculty practice plan and how they help guide strategy.

Location: PDC Offices, Durham, North Carolina

Trainee Roles and Responsibilities:

- Attend key operational and strategy sessions including meetings of the PDC Board.
- Deliver project recommendations and system changes for assigned projects.
- Present recommendations to multi-disciplinary teams with senior leadership.

Sample Projects:

- Review strategic hire plans as institution adds hospital capacity and increased specialty services.
- Analyze opportunities for expansion of CPDC through acquisitions including a financial analysis of downstream revenue.
- Outline a plan to maximize revenue opportunities and minimize risks as provisions of healthcare reform are enacted.

Criteria of a Successful Rotation:

- Immersion in and understanding of both the challenges and use of effective change methods within a complex system
- Ability to create and communicate tactical and business plans to address operational, strategic and quality goals
- Ability to align operational departments, measures, goals, tactics, or priorities to an organizational mission and vision

Department Management and Operations

Course # DOP

Understanding the role of Department level management is crucial to understanding how a complex health system functions. With the majority of activity of a Department being clinical services, physician executives must know how to balance competing priorities, physician needs, and budgetary prudence. This rotation will allow the trainee to work in the office of the Department's Vice Chair for Clinical Operations to function as a junior-level physician executive.

Rotation Director: Varies

Objectives:

- Describe the multiple services of the Department and how management balances priorities of the clinical, research and teaching missions.
- Explain how clinical services and academic departments function within the larger framework of institutional priorities.
- Identify the role of physician-executives in a complex system of service lines.
- Participate in leadership meetings of the Department as well as PDC and DUHS.

Location: Duke University Hospital and other locations

Trainee Roles and Responsibilities:

- Demonstrate initiative while completing 1-2 high priority projects within the Department.
- Participate in routine meetings of Department Leadership and other institutional meetings at which Department representation is required.
- Participate as the Vice Chair's designated representative at meetings.
- Foster discussions that bring alignment to the educational, clinical, teaching missions of the Department.

Potential Projects:

- Develop a business plan for expanded clinical services at new locations.
- Implement practice redesign efforts to improve quality as well as clinical productivity.
- Outline a plan to meet workforce needs of the Department with respect to future demand and maximizing use of advanced practice professionals.
- Create plan for alignment of the Department with DUH on areas of strategic interest for both parties.

Criteria of a Successful Rotation:

- Successful participation in the objectives, roles and responsibilities outlined above.
- Identification of the trainee as a resource and participant for future initiatives within the Department.

Public Affairs and Government Relations

Course # PAR

State and federal regulatory agencies, legislative bodies and administrations exercise extraordinary control of academic medicine and health care systems. Understanding the inner workings of each of these government domains, skillfully presenting appropriate position statements for constituent groups, and interpreting pending and enacted policy decisions are critical to the effective management and strategic planning of health care organizations. This rotation focuses on policy interpretation, analysis, projection and effective promotion to further health system goals.

Rotation Director: Paul A. Vick, Associate Vice President, Office of Government Relations

Objectives:

- Analyze legislative actions, pending policy and implementation implications for Duke Health
- Predict consequences of policy implementation for Duke Health and constituent groups
- Devise strategies to inform and impact policy decisions

Locations: Government Relations Offices, Erwin Terrace

Trainee Roles and Responsibilities:

- Attend key meetings and strategy sessions
- Gather data and provide authoritative analysis of actions or proposed actions of regulatory agencies, legislative bodies and state and federal administrative offices
- Develop multiple scenarios for action plans, pending the outcome of specific legislative scenarios
- Provide recommendations to senior leadership

Sample Projects:

- Analyze implications of Affordable Care Act and other legislation implementation on multiple Duke Health constituent groups
- Devise strategies to regularly inform state and federal legislative bodies of Duke Health priorities
- Triage competing policy demands for presentation to state and/or federal legislative bodies, establishing priorities, appropriate legislative contacts, and case statements

Criteria of a Successful Rotation:

- Demonstrated ability to develop, document, and implement policy analysis, projection and promotion of Duke University Health System interests at multiple governmental levels
- Positive evaluation from team members

Supply Chain Management

Course # SCM

Understanding how supply chain activities, including management and negotiation of contracts for goods and services, logistics and materials distribution, cost reduction including price and utilization, and relationship of supply chain analytics to analyze procedure costs impact the functioning of a health system is vital to a physician executive's repertoire of skills. This rotation will focus on the key aspects related to the acquisition of goods and services, supplier relationships, and cost reduction.

Rotation Director: Jane Pleasants, Vice President, Procurement and Supply Chain Management

Objectives:

- Describe and participate in the product review process including the intricacies of vetting risks, malfunctions, training and the ongoing relationship with vendors.
- Review and recognize the leverage physicians have in all aspects of contract negotiations with vendors.
- Describe the complex world of financial transactions as they relate to pass-through costs, non-labor spending, changing reimbursement patterns, and supply chain analytics
- Participate in "follow the product" experiences to understand how items go from vendor presentation/detailing to purchase to warehouse to the patient bedside.

Location: Varies