2017 STRATEGIC PLAN

The Department of Anesthesiology, Pain Management & Perioperative Medicine
Message from the Chair

The Department of Anesthesiology, Pain Management & Perioperative Medicine at Henry Ford Health System (HFHS) launched a comprehensive strategic planning process early in 2016. This document outlines these deliberations and demarcates the identified departmental priorities for the next five years. It represents a bold, carefully crafted road map of how we are going to realize our shared vision of the future and our path to achieving an ethos of distinction.

Over the last eighteen months, our department has made major investments in personnel, infrastructure and technology. These have created opportunities that drive improved quality care initiatives and greater accountability. Together with our strategic partners we have shaped a culture of cooperation, increased efficiency, augmented research output, and improved our education programs.

Creating this proposal would not have been possible without the guidance and help from our partners in the HFHS Human Resources Department. Kathy Oswald and Laurie Jensen have walked us through the thorns and thickets and allowed us to recognize what must be changed from our past, and what new approaches we should adopt as we move forward. A huge debt of thanks goes to one of our colleagues, Leslie Walton, D.O., who was crucial in putting together this document. Gratitude must also go to those individuals from all areas of our professional world (anesthesiologists, surgeons and administrators) who helped us during this long process.

The ideas and initiatives described in this document reflect who we are and portray a bold, bright vision. I believe that we have crafted the correct strategy and, even more significantly, molded the best team to create the organization described in this plan.

The future is ours to grasp.

Thank you,

Michael C. Lewis, M.D.
Joseph L. Ponka Chair, Henry Ford Health System
Professor of Anesthesiology, Wayne State University
Preamble

We are the HFHS Department of Anesthesiology, Pain Management & Perioperative Medicine. Our team consists of clinical staff, educators and researchers.

In a continuously shifting health care environment, our clinical obligation is to create effective, safe, and efficient care models. We have the added responsibility, as an academic department, to create new knowledge that will guarantee the continual evolution of the quality of our clinical care, education and research. If we are going to fulfill this awesome charge, we must recruit the most talented staff, develop a culture of mentorship, and adopt the highest professional standards.

Considering the enormity of this undertaking, one might be persuaded that the safer tactic would be to select small incremental steps along the path rather than engage in bold initiatives. However, our approach has been quite the contrary – we confidently believe that we must be resolute, bold, sound, and above all, effective. The purpose of this process is to be “intentional.” This plan envelops a detailed process of discussion, consultation, expert opinion, and determination to optimally use our resources.

The Process

In October 2015, Professor Michael C. Lewis, M.D., was recruited as the new Chair from the University of Florida College of Medicine-Jacksonville (UFCOM-Jax). Prior to serving at UFCOM-Jax, Dr. Lewis built his career and spent 18 years at the Miller School of Medicine at the University of Miami where he served as Program Director, Vice Chair, and Senior Associate Dean for Graduate Medical Education.

In the world of academia one of the most important responsibilities of leadership is to work with the group to develop a strategic plan. Therefore, our initial step was to obtain broad consensus among the department’s leaders that this exercise would be a critical component of good management and governance. It was felt that such an activity would help ensure the department would remain relevant and responsive to the needs of the variety of stakeholders it serves (e.g. patients, surgeons, HFHS, etc.). The general belief was that both the planning process and the subsequent documents produced would contribute to departmental stability and growth. It would facilitate new program development and enable the department to consider the future in an orderly and systematic way.

Once such consensus was obtained, our next step was an exercise of self-examination. We distributed a SWOT (Strengths, Weaknesses, Opportunities, and Threats) survey to all relevant parties with an interest in any aspect of the departmental activities (senior staff, resident physicians, Certified Registered Nurse Anesthetists (CRNA), surgeons, nurses, and administrators). The result of this analysis is demonstrated in the table on the next page.
It was recognized very early on that in order for our goals to be met, we had to be bold and imaginative in our thinking. Excellence could only be achieved by investing significant resources to foster professional development and to advance quality in the entire department.

We were dedicated to retaining the existing outstanding faculty members who have built up and sustained this department. In addition, to bolster this group over the past year, we recruited many physicians with impeccable credentials and the zeal to foster distinction via enhancement of clinical medicine, educational programs, and research. Together we have created a truly formidable team. Any new paradigm emerging from the planning process had to be anchored in this deep appreciation of what preceded us, as well as a determination to remove any obstacles to our development.

In summary, the department is committed to developing a culture of leadership that fosters excellence. We are confident that if we follow the road map described in this document, that exponential strides in excellence will be achieved. Leadership and collaboration will be the basis for continual quality improvement in the clinical and scholarly activities of the department; thus ensuring dedication to the vision of our health system leadership.
Aligning with Organizational Goals

“True North” is a basic notion in the Toyota lean process improvement model. It represents the compass needle for lean transformation, and provides a guide to take an organization from its current condition to where they want to be. Like a mission statement, it is the expression for the purpose of the organization. Our strategic plan aligns with the “True North” of HFHS. It anchors itself in concepts such as high value care, evidence based practice, cost effectiveness, efficiency, high quality, patient safety, superior educational programs, research, and workforce engagement.

TRUE NORTH FRAMEWORK

*The trusted partner in health, leading the nation in superior care and value*

“A Culture of Leadership that Fosters Excellence”
VISION

The Department of Anesthesiology, Pain Management & Perioperative Medicine will be recognized for leadership that fosters excellence in patient care, education, and scholarly activities. Over the next five years, our vision is to transform a clinically excellent department into the leading academic department in the Midwest. It will foster growth through transformative innovation in safety, quality, education, efficiency, research, and workforce engagement.

MISSION

To provide the safest and highest quality care in all areas of anesthesiology through clinical excellence, education, innovation, and the advancement of cutting edge research. The department aims to establish a culture of mentoring, collaboration and enhanced professional development.

VALUES

- COLLABORATION
- EXCELLENCE
- INTEGRITY
- RESPECT
- COMPASSION
- INNOVATION

“You don’t create values; you uncover them in an organization.”

-Alain Gauthier
Environmental Assessment

Anesthesiology in Southeastern Michigan constitutes a unique health care work environment. It is a very clinically competitive market. Apart from HFHS, there are other academic programs in the Detroit area (e.g., Beaumont, Detroit Medical Center, and St. John Medical Center) and in the region (e.g., University of Michigan). In addition, there are several very high quality private practices.

Henry Ford Hospital in the city of Detroit, has one of the highest number per capita of Critical Care beds for advanced and specialized care in the region, and receives referrals from around the state of Michigan, as well as internationally with our proximity to Windsor, Canada. Our second location in the suburb of West Bloomfield offers the same excellence of clinical service in the context of a community-based hospital. We also staff several freestanding ambulatory surgery centers and pain management clinics.
Action Plan
The department will collaborate to develop a cutting edge perioperative surgical home (PSH) model of care. This model recognizes that too often perioperative care plans are variable and fragmented. The surgical-need decision often disconnects patients from their medical care. Surgical patients may experience lapses in care, duplication of tests and preventable harm. Additionally, costs rise, complications occur, physicians and other health care team members are frustrated, and the patient and family may obtain a lower-quality experience of care. We will partner with key stakeholders in the Henry Ford Medical Group (HFMG) and the hospitals to develop a patient-centered surgical home at HFHS.

By embarking on this initiative, we recognize that innovation must occur within each patient’s episode of surgical/procedural care. A new model of perioperative care must be developed in the patients’ best interests. Such a collaborative learning environment encompassing interdisciplinary and inter-professional groups will be vital in the development of this new model of care. In creating a patient-centered, physician-led system of coordinated care, we are striving for better outcomes, better health care, and reduced costs. These goals will be met through shared decision-making, and seamless continuity of care for the surgical patient, from the decision to operate through recovery, discharge, and beyond.

As part of this consortium, anesthesiologists will need to view the role of the perioperative physician as an expansion of their specialty. We must learn to navigate in the era of finite, and likely significantly decrease fiscal resources. Initially, the PSH will target five surgical service lines (Bariatric, Breast, Head/Neck Cancer Surgery, Hip/Knee Arthroplasty, and Spine) and nine comorbidity lines (Anemia, Cardiopulmonary, Glucose, Hypertension, Nutrition, Obstructive Sleep Apnea, Pain, Postoperative Cognitive Dysfunction, Postoperative Nausea and Vomiting).

Key Indicators
a. Determine clinical lines (2016-2021)
b. Create organizational infrastructure of PSH (2017-2018)
c. Develop and apply evidence-based, outcome-oriented protocols (2017-2018)
d. Multidisciplinary team dedicated to minimization of adverse outcomes and decreased cost (2017-2018)
e. More efficient allocation of healthcare resources (2017-2021)
f. Collect data (2017-2022)
g. Improve outcomes, decrease length of stay and other metrics, and improve patient satisfaction (2017-2022)
h. Approach funding sources (2017-2022)
i. Submit grants (2017-2022)
j. Significant improvements for policymakers, payers, administrators, clinicians, and patients (2018-2021)
k. Publicize our successes to internal and external customers (2018-2022)
l. Conduct composite outcomes research on the process (2018-2022)
m. Submit publications on our research (2018-2022)
GOAL #2 – INNOVATIVE EDUCATION

Action Plan
Our program exposes trainees to the full spectrum of scenarios and patient care pathways inherent in an urban tertiary care and Level-1 Trauma Center. We have the leading solid organ Transplant Program in the State, an innovative minimally invasive Structural Heart Program, and long standing excellence in multiple surgical specialties and Interventional Pulmonology and Gastroenterology. Our medical group provides care to the underserved population of Detroit and surrounding suburbs. However, there is a growing proportion of our patients who are specifically referred for specialty care at HFHS from around the region and the nation.

Culture of Mentorship
Our goal at HFHS is to attract the highest quality residents for our Anesthesiology training programs. Excellence in medical education is a core value for our entire team.

The department will actively engage medical students even earlier in their education by being involved in numerous teaching experiences and workshops at the Wayne State University School of Medicine, our academic partner, as early as the third year of medical school. We plan to institute a medical student experience in Anesthesiology that will include the whole PSH process. The idea is to excite the imagination of medical students before they make their long-term training decisions.

Since we seek to train our future colleagues, our residents and staff need to develop mentorship relationships. We will formalize this in stages moving from our current voluntary consultation, to a formal assignment of each faculty mentor to a group of four residents. We will phase this in to allow each new resident to be part of a group, including each level of training with the same faculty mentor. As a result, the resident at an entry level can consult with the more senior resident, closest to their recent level of experience, and so forth. We will assign protected time for this group to meet on a regular and ongoing basis, so that its members remain closely abreast on the progression and well-being of each other.

A. Resident Education
We will improve the current intern (PGY-1) experience in our Anesthesiology didactics and training. We currently offer a two-hour experience for our interns each month in the operating room to advance in the practice of basic airway management skills. We also have interns participate in Wednesday morning didactic sessions as well as the Journal Clubs with our national Visiting Professor (VP) series. We will enhance the PGY-1 longitudinal curriculum by including earlier exposure to review keyword topics relevant to the Basic Content Outline of the American Board of Anesthesiology, in preparation for their Basic Exam at the start of their CA-2 (PGY-3) year.

With the new state-of-the-art equipment, intraoperative teaching, expert lecture series and highly motivated and qualified staff physicians, the education component of HFHS is on a trajectory to soar and expand its training programs in the coming years.

Residents/Fellow physicians will also take advantage of the cutting edge innovative training starting with the introduction of the Flipped Classroom (FC). The FC is an instructional strategy and a type of blended learning that reverses the traditional educational arrangement by delivering instructional content, often online and outside of the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home and later, engage in classroom concepts with the guidance of the instructor.

In addition to the intense didactic program, there will be an active VP series. This will allow exposure to thought leaders in various fields. Invited experts will give departmental Grand-Round (GR) type lectures and lead Journal Clubs with residents.
B. Resident Scholarly Activity
Departmental support has been and will continue to increase for those interested in research. The number of Institutional Review Board (IRB) submissions for 2016 has doubled (12 to 35) since 2015 and the number of abstract submissions and oral presentations has increased by more than 700 percent (14 to 105) in 2016, a trend expected to continually increase. In order to maintain this momentum, there will be monthly interactive classroom sessions designed to help with research education and design. Additionally, there are several online resources available, along with a designated individual from Graduate Medical Education (GME) who aids in scientific writing. A designated Senior Staff member who is responsible for research and the grant component of the educational programs is in place and we recently recruited a new Vice Chair for Research. There are a significant number of members participating in the IRB submissions.

C. Clinical Skills
At every opportunity, our providers will learn in an environment rich in high fidelity simulation. The goal is to develop numerous clinical scenarios, which would be rehearsed not only with anesthesiology residents but also those from other disciplines and possibly learners from other professions. This will allow us to carefully replicate real-life clinical scenarios and reinforce the concept of the team care model of care.

D. Clinical Ultrasound Training
A competency based education in ultrasound for surface imaging for procedures and perioperative cardiac evaluation will allow our providers real-time information to facilitate patient care. Recently, the value of clinical ultrasound has been accelerated by the development of smaller, mobile, yet high quality ultrasound machines at cost effective pricing. Residents will have ultrasound exposure in many clinical venues. Currently, surface ultrasound imaging is routinely utilized for arterial and venous line access for monitoring and resuscitation. The usage of surface ultrasound has recently exploded into Regional Anesthesiology. The use of ultrasound for regional procedures has resulted in new levels of accuracy and precision. The success of these procedures are superior to techniques using landmarks, paresthesias, and nerve stimulation. The use of surface ultrasound for both line access and regional procedures has resulted in fewer complications for patients. Improved access to ultrasound technology has improved cardiac diagnostics for perioperative patient care. Ultrasound assessment of cardiac performance and pathology in the perioperative period allows anesthesiologists to appreciate this technology’s relevance and importance. Moreover, the idea of physician-performed, goal-focused echocardiography is an important emerging development, with an increasing evidence base that clinicians will frequently make new diagnoses and change their management, based on their own echocardiography findings. The department aims to purchase an echocardiography simulator, additional echo probes for this purpose, and to ensure that all staff will be trained in basic examination with Transthoracic Echo (TTE). Residents will also be exposed to TTE and transesophageal echocardiography (TEE), as well as advanced ultrasound.

E. Resident Board Examination Preparation
In addition to lectured teachings, there will be a strong emphasis on Oral Board (OB) preparation and review. Residents currently participate in Objective Structured Clinical Exams (OSCE) with standardized patients as part of fulfilling training needs in areas of interpersonal and communication skills, delivering bad news, and safe transfers of care. These experiences will be enhanced and supplemented, so that our trainees will have preparation for the newly implemented scenario stations that will be added to the American Board of Anesthesiology's (ABA) Applied Examination. Our residents currently have ongoing quarterly Mock Oral Board exams in our Simulation Center that are video-taped to enhance the realism and allow opportunities for resident and faculty coaching and feedback. Structured practice exams will ensure each resident and fellow is thoroughly prepared for their ABA Oral Board examinations.
F. Development of Fellowship Programs

Over the next two years, we plan to introduce several fellowship programs that reflect the department’s strategic direction. A year-long Perioperative Medicine Fellowship will aim to train fellows concerning the structure and functioning of the new perioperative environment. In addition, we plan to submit a proposal (2018-2019) for a Critical Care Fellowship that will be unique and cutting edge. The goal would be to train learners about management of critically-ill patients and how to coordinate longitudinal care of patients in the modern healthcare environment. The Fellowship will be two years in duration and involve coordinated teaching, not only from our intensivists, but also from those integrated into the PSH. Other fellowships being planned, as the department becomes a system-wide enterprise, are Obstetric, Regional (2018), Transplant Anesthesiology and Neuroanesthesiology. The expansion of our clinical training fellowships in addition to rigorous residency and fellowship training by highly qualified Senior Staff, is sure to place HFHS at the forefront of academic institutions in the country.

Our goal is to be the regional leader in Anesthesiology continuing education and to become a resource to practitioners in Michigan and beyond. Additionally, our goal is to utilize the programs discussed above to create continuing education programs for the anesthesiologists in the region. This initiative would result in creating a mindset for HFHS Anesthesiology department as a professional resource for the whole community.

Key Indicators

a. Expand clinical practice support (2017)
b. Create a mentorship culture among medical students, residents, and staff (2017-2018)
c. Streamline interview processes to gain competitive applicants (2017-2018)
d. Development of OSCE and training for the latest additions to ABA Applied Exam (2017-2018)
e. Opportunity to hire an education specialist to specifically target reverse classroom training and implementation and support, resident preparation and scholarly support (2017-2018)
f. Expose residents to new innovative areas of Anesthesiology (2017-2022)
g. Create a platform for extramural funding (2018)
h. Implement standardized testing strategies (2018)
i. Plan future service lines (2018)
j. Expand Resident/Fellow training programs (2019)

G. PSH

As mentioned above, our department is building a robust PSH. Therefore, it is our obligation to also offer advanced training in Perioperative Medicine during the residency training. The introduction of unique and specific education in this discipline will prepare residents for the new reality of the era of bundled payments, giving them specific instructions in patient optimization, aggressive pain management, the engineering of efficient pathways of treatment, and the new realities of accountable care. The traditional rotations in preoperative optimization and Post Anesthesia Care Unit (PACU) will be integrated into a longitudinal, multidisciplinary rotation, which will add an inpatient consultation and perioperative medicine consultation service, PSH education, and education in the business aspects of an anesthesia practice. This rotation will allow residents to follow patients through the entire perioperative process and learn how to measure quality and outcomes, and apply this knowledge to the anesthesia practice.

Key Indicators

a. Create and implement a resident rotation in Perioperative Medicine (2017)
b. Fellowship for PSH/Critical Care (2018)
GOAL #3 – SCHOLARLY LEADERSHIP

Action Plan

A. Fostering Research Initiatives through Leadership
Within the Department of Anesthesiology, Pain Management & Perioperative Medicine, there is a commitment to bolster academic activity and become one of the premier anesthesia training sites in the nation. It is only by a focused effort to participate in the creation of new knowledge and a critical assessment of the current literature that the culture of scholarly inquiry will flourish.

We are committed to creating a culture of investigation. The current focus is on Pain, Regional, Cardiac, Obstetric, Neurosurgical and Transplant anesthesia, including novel education paradigms, and the PSH. With the advent of the PSH, there will exist potential new areas of focus in perioperative operations and outcomes research.

In order to move this initiative forward, the department recruited Don Penning, M.D., from the University of Colorado as our first vice chair for Research and Division Chief of Neuroanesthesiology.

In order to create this new priority, resources will be invested both in infrastructure and programs. A curriculum will be developed for faculty who wish to participate in these efforts. It will include, but is not limited to, modules on study design, literature review, bibliography creation, medical writing, statistical analysis, and grantsmanship. There will be a systematic effort to identify and encourage projects that will result in publication.

Applications will be made for extramural funding for research. Initial efforts will be for small grants. The idea is to develop sustainable research models and generate preliminary data that could then be utilized in applying for large national funds.

B. Resident Scholarly Activity Development
Residents with an interest in research and an academic career path will be identified and resources will be given to aid in their efforts. Occasionally, highly motivated residents may be supported to obtain formal research training through participation in Master’s level education.

This is a new initiative aimed at producing scholars. As a senior project, all residents will be required to present a piece of investigation. In the past, this largely was a literature review or case report, which will continue, but increasing efforts will be directed at hypotheses-driven investigations. Also, to create a wider scholarly culture in the city of Detroit, collaborative research initiatives will be launched. There will also be shared research projects with Michigan State University (MSU) and Wayne State University (WSU) for development of institutional programs to introduce residents to scholarly activity.
C. Research Target Goals

Like many of our initiatives, the goals set for research are aggressive. First year goals are to complete the database of ongoing projects, abstracts, publications, and IRBs submitted and approved. The purpose is to track projects from the initial planning to formal presentations and publication. Through this tracking, we can identify projects that are excelling and deserving of greater support plus projects that are lagging and may have hit roadblocks. We will also evaluate funding requested and received, monitor budget reconciliation of all grants, and resident projects ongoing and completed. Within the department, there will be a yearly research retreat to develop themes to identify crucial relationships and infrastructure needs, including but not limited to, development of research budgets, administrative support, analytical support and software. We will also create a research website for both education and as a resource for researchers and external potential partners looking for collaborators.

During the second, third, and fourth years, we will use the anchor described above to expand the project. We will identify a couple of new senior staff to invest departmental resources, both time and money, in an effort to successfully apply for extramural funding.

Year five goals are just as assertive. There is a firm plan to increase faculty membership on professional review boards as journal reviewers, increase grant money available for those interested in research, increase the number of full professors from two to five, increase the ratio of publications/abstracts, and institute a Research Day where residents and fellows can showcase their case reports and publications.

Realizing that research is a critical component to the residency and fellowship training programs, our emphasis is to aggressively meet all goals at one and five years respectively. Our mission is to not only become an institution focused on extraordinary clinical care, but also to become pioneers in cutting edge new medical developments through research, and to be the leader of scholarly activity in the region.

Key Indicators

a. Create wider scholarly collaborative research within the city of Detroit (2017)
b. Create systematic effort for staff research involvement (2017-2018)
c. Year-over-year increases in IRB submissions and ongoing projects, abstracts at major meetings (ASA, International Anesthesia Research Society (IARS) and subspecialty societies) (2017-2018)
d. Provide analytical support for extramural funding participants (2017-2022)
e. Expand Perioperative operations and outcomes research (2017-2022)
f. Increase the citations and impact factors of published work (2017-2022)
g. Create a path for highly motivated and qualified residents to extend their residency one year, in order to obtain formal research training in a Master’s level degree program with funding through a combination of departmental supports, competitive scholarships and graduate assistant teaching, and occasional departmental clinical “moonlighting.” A careful vetting process will be required to ensure they are “on-track” toward clinical competency prior to allowing residents to enter this path (2018-2022)
h. Increase the ratio of publications/abstracts, grants (both number and dollar amounts) from both agency and industry sources (2018-2022)
GOAL #4 – CLINICAL DISTINCTION

Action Plan
Our department views the enhancement of patient safety and the provision of high value clinical care as a moral imperative. Over the next five years, we plan to invest significant resources and time in the development of a safety culture. Such a philosophy has been the fundamental driver for safe, effectual, and appropriate patient care.

A. High Reliability Initiative
In order to consistently provide the highest quality care to patients, and to develop a system of safety and patient satisfaction, we have implemented a number of processes designed to ensure patient safety and maintenance of the quality of patient care delivery within the department.

Patient safety is the cornerstone of a high-reliability organization and the essence of safety is the active prevention of harm events. Our emphasis is on a system of care delivery that:
1. Anticipates human errors and works to prevent them.
2. Acknowledges and learns from the errors that do occur.
3. Is built on a culture of safety that supports all of those injured when errors occur, including the caregivers involved in the errors.

The efforts of the department in this domain have been progressively more aggressive to ensure that we are meeting all quality metrics, clearly detecting actionable reasons for our failures and implementing processes to prevent the repetition of these errors. As a key component of our quality and safety initiative, we have replaced traditional morbidity and mortality conferences with a standardized root cause analysis (RCA) approach. Findings surrounding various adverse events are presented at our GR to highlight perioperative events, potential concerns, discuss solutions and work to ensure that occurrences do not recur. Our goal is to continually decrease the number of patient safety related events to zero.

One of our leading metrics is to analyze and compare complications and length of hospital stay for patients who were seen in the preoperative optimization clinic. Even though patients are evaluated prior to their surgery, avoidable perioperative morbidity (i.e., thromboembolic phenomena) continues to plague the intraoperative environment. Moreover, we will diligently work to identify events in which a near miss or actual error occurred and whether it could have been prevented by compliance with a safety check list or other standard safety procedures that we can implement. High fidelity simulation will aid us as we work toward these goals. This modality will allow our providers to work through clinical scenarios, anticipate and develop solutions to potentially injurious events or situations.

A number of activities engaged by anesthesiologist providers, including hand washing and sterile techniques during invasive procedures, have been correlated to prevent perioperative infections and sepsis. It has been noted that health care worker compliance with hand hygiene guidelines are an important measure for health care associated infection prevention, and has been shown to significantly reduce perioperative sepsis. Yet, overall compliance to this simple exercise remains low. Our goal is a culture transformation. Within three years, we plan to further increase awareness and engagement among all stakeholders to create a culture focused on the avoidance of perioperative adverse events.

Key Indicators
a. Anesthesiologists must have adequate support to avoid fatigue, which could compromise patient care. To this end, the shifts that providers work have been reduced to no more than 14-hours of continuous clinical service (2017)
b. In order to maintain continuity of care, we have designed systems to avoid multiple changes in anesthesia providers during prolonged cases (2017)
c. We have expanded the Peer Review Committee to audit patient charts and make evidence/practice-based recommendations on appropriateness of care provided (2017).
d. We work diligently to identify events in which a near miss or actual error occurred and determine the mechanisms of prevention with any standard safety procedures (e.g., checklist, communication tools, etc.) that we can implement RCA (2017).
e. By using simulation sessions, we encourage our providers to work through clinical scenarios that help us anticipate and develop solutions to potentially injurious events or situations before they occur in an active clinical setting (2017-2018).
f. In order to enhance the clinical care and perioperative experience of our patients, we have developed the PSH. This system is designed to identify clinical needs and optimize patients throughout their perioperative course. One of our leading metrics is to analyze and compare complications and length of hospital stay for patients who were seen within this system (2017-2022).

It is our vision to be one of the leading academic Anesthesiology institutions in the Midwest. We understand that in order to get there, quality and safety must be at the forefront of patient care. In addition, how we provide service to our patients is also a key indicator of our ability and willingness to focus on the needs of the patient. We will monitor indices such as Press Ganey/CG-CAHP/Patient Satisfaction Scores frequently and regularly to ensure that we are meeting our service and quality metrics and continuously review our practices to improve our outcomes.

B. Multi-Disciplinary Pain Management Clinic
The department manages six pain medicine clinics with locations throughout Southeastern Michigan. They are located in Henry Ford Hospital, Henry Ford West Bloomfield Hospital, Ford Road Medical Center, Columbus Medical Center, Pierson Medical Center, and Lakeside Medical Center. They currently offer comprehensive evaluations and treatment planning for patients with chronic cancer and non-cancer pain. Chronic pain is very complex and requires the participation of several specialists to manage. Therefore, our goal over the next five years, in collaboration with other departments such as neurology and psychiatry, is to transform several, if not all, of these centers into true multidisciplinary pain programs. An interdisciplinary care team, led by physicians, nurse practitioners, registered nurses, social workers, physical therapists, and other specialists will care for these patients. The group will develop an individualized treatment plan for each unique patient. This will provide patients with the necessary skills, medical intervention, and direction to effectively manage their chronic pain.

Key Indicators
- Transform most treatment locations into centers that offer a Multidisciplinary Pain Program (2017)
- Create organizational structure and recruit necessary staffing to support the services (2017)
- Expand pain services to meet demand (2017-2022)

C. CRNA Workforce
The CRNA workforce is a critical component of daily operations within the department. Our care team consists of CRNAs, resident physicians and senior staff. Staff Anesthesiologists have a very cohesive, synergistic and group-based approach dedicated to the care of the patient and Operating Room (OR) workflow. Our goal is to increase the engagement of this vital group. The CRNA workforce is involved in all facets of clinical care, including direct patient care, PSH, committees within the department and our Electronic Medical Record (EMR) compliance and training. To meet our current clinical needs, there is an effort to expand the CRNA workforce. Educational/Clinical support will be provided for our CRNAs that include lectures, new product training and exposure to simulation. Our department will develop a program of scholarly activity among our CRNA group. In addition to expanding residency-training programs within our institution, there is also an effort to initiate a CRNA training program that focuses on team-based care for the 21st century.

Key Indicators
- Expand CRNA workforce to meet current clinical needs (2017-2019)
- Practice team-based environment focused on patient care (2017-2019)
**Action Plan**

**A. The Structure**

Effective management assumes a robust and clearly defined organizational structure. The department’s leader is the Chair. He leads an executive group that at present consists of the Executive Vice Chair, Vice Chair of Operations, Vice Chair of Research, Director of the PSH, Residency Program Director, Chief of Service at Henry Ford West Bloomfield Hospital, Chief of the Ambulatory Service, and the Group Practice Director. This group meets monthly.

There are also Division Heads for every clinical discipline in the department. At present, we have a Division Head for Pain Management, Regional Anesthesiology, Critical Care Medicine, Cardiovascular and Thoracic Anesthesiology, and Transplant Anesthesiology. There is also an Anesthesiology OR Director who is the physician anesthesiology lead that coordinates OR operations, in collaboration with the organization’s Medical Director, Surgical Services.

**B. The Mission**

Clinical excellence, enhanced productivity, pioneering research, superior education, operational efficiency and financial solvency represent the lead mission coveted by every academic Department of Anesthesiology. The success of these missions is dependent on the effectiveness of the whole staff, and is enhanced by increasing individual performance.

Personnel are an important and strategic resource that propels departmental operations. If the staff is engaged and the mission and incentives are aligned, then success is more likely to occur. We will constantly work to provide the right conditions for all our staff, and give them the opportunity to do their best each day, with committed focus to the department’s goals and values.

Our department understands that we are only as good as our providers. Such engagement is based on trust, integrity, two-way commitment and open communication. We know that increased retention, operation, efficiency, and well-being will follow increasing engagement. In an effort to meet these goals, there is a concerted effort to recruit and maintain dedicated, highly skilled senior staff and anesthesia practice providers and to offer an environment that is professionally fulfilling, while allowing work-life balance.

**C. Fostering an Environment Committed to Workforce Engagement**

Lack of engagement can result in staff turnover, interruption of departmental missions, and loss of revenue. Recently we have witnessed a steady increase in the department’s engagement score. It had been historically low. In 2015, it rose to the 85th percentile, and then to the 97th in 2016. Within the division of Pain Management, we plan to increase physician engagement from the 29th percentile to the 75th percentile over the next three years. Within the Department of Anesthesiology, the goal is to maintain anesthesiology physician engagement above the 75th percentile in 2016 and beyond. In previous years, there had been significant turnover of staff. Over the last year, there has been a decrease in physician turnover from seven in 2015 to two in 2016.
Having robust and deliberate departmental governance is important in maintaining staff engagement. We have developed a leadership structure with clear lines of reporting through the Division Chiefs, to the Vice Chairs, through to the Chair. Each division holds regular meetings at which issues surrounding their areas of clinical care, education, and scholarly activities are discussed. There is an Executive Group that consists of the Chair, Vice Chairs, Residency Program Director, and Site Directors that meets monthly. Regular staff meetings are held so that the deliberations of these leadership groups can be reported back to the staff. Developments as a result of these discussions, updates within the department, along with recognition of staff accomplishments are published in a regular monthly newsletter that is sent to the entire department.

Successful leadership requires careful resource management to fulfill core mission goals. Over the next five years, we plan to improve staff engagement by instituting a staff engagement impact plan and communicate results regularly with all providers. Components of this plan include a comprehensive wellness program, career development projects, and a transparent incentive program. In addition, the department will hold an annual retreat to plan initiatives and review actions at huddles or other senior staff meetings to check and monitor progress.

D. Community Involvement
The department’s commitment to serve our community reaches beyond the walls of our hospitals and health centers. Examples of this commitment include, but are not limited to, the following initiatives:

- **Annual health system sponsored charitable events** – One example is “Men Who Cook.” The event, a fundraiser for the Tom Groth Patient Medical Needs Fund, included several dozen culinary teams, a live auction, a raffle, and live entertainment.

- **City-wide learning and research collaborative**
  We have formed an agreement with other residency programs in Detroit to cooperate and develop joint teaching and research programs. One example is the quarterly city-wide GR when leaders are invited to lecture to the city’s anesthesia community.

- **Community events** such as the annual “Kidney Walk.”

E. Promoting a Transparent Financial Strategy

- **Cost Containment**
  Our goal is to always have the personnel on board to meet all of our missions. However, to be responsible members of the wider HFHS organization we will align faculty recruitment with anticipated cuts in reimbursement. We will demonstrate a commitment to hospital cost containment through sensible drug and equipment use. The cost-accounting efforts of the PSH will aid in fiscally responsible decisions.

- **Improved Efficiency**
  OR efficiency is defined by Dexter, as “that which minimizes OR inefficiency.” OR inefficiency is defined as the sum of: (hours of over-utilized time x cost/hour of over-used OR time) + (hours of under-utilized time x cost/hour of under-utilized time). The department will continue to work with other stakeholders in perioperative services to improve operational efficiency through initiatives in such areas as first-case start time and turnover time initiatives. Measurement of efficiency will be assisted by the efforts of the PSH.
**Key Indicators**

a. Obtaining consents prior to surgical procedures (2017)
b. Procuring clearances for surgery (2017)
c. Develop a process improvement to address OR inefficiency (2017)
d. Allocating adequate resources to meet OR efficiency (2017-2022)
e. Improving staff member communication (2017-2022)
f. Identifying patient safety risks (2017-2022)

**Additional Revenue**

The department recently carried out a comprehensive audit of our financial standing using a third party external consultant. Several opportunities were discovered to enhance our revenues. Over the next five years we intend to maximize existing billing opportunities. Furthermore, we will start to explore providing outside anesthesia services.

**Enhanced Marketing**

The Department of Anesthesiology, Pain Management & Perioperative Medicine will actively promote its services and faculty to other providers and the wider community.

**Key Indicators**

a. Publish a monthly external newsletter (2017)
b. Host community sponsored social events (2017)
c. Increase financial standing by maximizing billing opportunities (2017-2018)
d. Maintain physician engagement above 75 percent (2017-2018)
e. Improve operational efficiency (2017-2022)
f. Publish a departmental annual report (2018)
g. Initiate Public Relations efforts - press release (2018)

**F. Departmental Wellness**

The departmental leadership during our deliberations in 2016 very quickly came to the realization of the benefits of wellness promotion. Chronic diseases can lead to a decline in the overall health of staff, leading to lower productivity and contributing to missed time from work. Moreover, a lack of work-life balance can result in decreased staff engagement, decreased morale, and increased staff turnover.

HFHS protects the safety and well-being of its employees while providing them with opportunities for better long-term health. Therefore, a survey to test the interest in a Wellness Program was sent to all staff and results indicated widespread support. The department has actively engaged with system wellness leaders and the Metabolic Health Program led by Tom Rifai, M.D., to implement this initiative. As a result, the Department of Anesthesiology, Pain Management & Perioperative Medicine will align with a system-wide roll out for the promotion of work-life balance, with a focus on metabolic health and wellness.

**Action Plan**

A. Develop a plan rooted in optimizing work-life balance, and metabolic health.

B. Roll out programs designed to increase wellness.

**Key Indicators**

a. Publication of wellness plan (2017)
b. Seminars to educate staff as to the structure of the program (2017-2018)
c. Launching of programs in alignment with HFMG designed to improve wellness (2017-2018)
d. Resurvey staff about attitudes toward wellness and effectiveness of the program (2019)
**GOAL #6 – IDENTIFY EXTERNAL SOURCES OF FUNDING FOR DEPARTMENTAL INITIATIVES**

**Action Plan**

Endowment development is one of the main priorities for the department over the next five years. Finance is crucial to each of our activities, and while our operating funds can support the bold initiatives described in this document, if we are going to reach our full potential, we need to develop, recruit, and secure naming opportunities to support both our cutting edge clinical and research activities.

We will create a departmental Development Committee with a direct reporting relationship to the Chair. This committee will:

- Work closely with the HFHS Development Office to generate fundraising programs. Together, we will create a list of potential key donor giving opportunities, and create a brochure that highlights our priorities. The brochure will be distributed extensively on our website, and will be circulated to foundations, alumni, industry, and potential donors.

- Coordinate activities with the Vice Chair of Research and other stakeholders to apply for extramural funding to support specific projects. Together they would identify key focus areas to raise awareness, and build “advancement niches” for Anesthesiology shortfall in the funds necessary to cover all of the costs of the activities described in this plan.

**Key Indicators**

We plan to work with the HFHS Development Office to generate support for:

- a. Awards and scholarships for residents, fellows and senior staff (2019)
- b. Endowed Funds ($1-3 million each) (2020)
- c. Expendable Funds: Donations could be in the form of expendable funds to support the department’s Merit Awards program. Awards can range between $30,000 to $100,000 each, per annum, for periods ranging from two to five years (2020)
**Summary**

This document outlines an ambitious comprehensive road map for the Department of Anesthesiology, Pain Management & Perioperative Medicine. It maps out a path of growth and maturity. Our goal is for this department to be the most efficient, safe, highly reliable anesthesiology group in the Midwest by the year 2022.

As we embark on this bold project, the focus is aligned in creating innovative clinical programs, new training paradigms, novel knowledge through robust scholarly projects, and be highly engaged in both our local and academic communities. This elaborate project will reach completion because of the efforts of a highly engaged staff that will not accept any standard but the best. As this plan unfurls it will garner attention from both the wider and academic communities that will want to emulate its structures and processes, and invest in its success.

### FIVE-YEAR TARGET GOALS

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<th>2017</th>
<th>2019</th>
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<tr>
<td>• Host community sponsored events</td>
<td>• Initiate scholarships for residents</td>
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<td>• Publish monthly newsletter</td>
<td>• Submit grants</td>
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<td>• Increase financial standing</td>
<td>• Proposal for Critical Care fellowship</td>
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<td>• Improve operational efficiency</td>
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<td>• Physician engagement &gt; 75 percent</td>
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<tr>
<th>2018</th>
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<tr>
<td>• Publish department annual report</td>
<td>• Expand pain service to meet demand</td>
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<td>• Initiate PR efforts - press release</td>
<td>• Generate support for endowed funds</td>
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<td>• Submit proposal for PSH, regional and OB</td>
<td>• Conduct composite outcomes research</td>
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<td>fellowship</td>
<td>• Generate support for expendable funds</td>
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<td>• Approach funding sources</td>
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<th>2021 - 2022</th>
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<td>• Top clinical and academic institution</td>
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