# UNIVERSITY OF HAWAI'I SYSTEM ANNUAL REPORT



REPORT TO THE 2015 LEGISLATURE

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ON THE
HAWAI'I MEDICAL EDUCATION COUNCIL

HRS 304A-1704

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#### **Introduction and History**

In response to the public outcry to close the gap of Hawai'i's severe physician workforce shortage with sufficient numbers of well-trained, qualified physicians, the 2003 State Legislature passed into law HRS §304A-1701-1705 and HRS §304A-2164. These statutes are administered by the University of Hawai'i at Mānoa (UHM) and its John A. Burns School of Medicine (JABSOM). They consist of three distinct, yet complementary components that work together to assess, strategically plan, advance, and under the right set of circumstances, accelerate the education/training of men and women physicians who will practice in communities throughout Hawai'i. *See excerpted text of statutes in the Appendix A.* 

- Component #1 [HRS § 304A-1702] **Graduate Medical Education (GME) Program**, was established to formally encompass the administration of UHM JABSOM's institutional graduate medical education (GME) program. <sup>1, 2</sup>
- Component #2 [HRS §§304A-1703 to 1705] Medical Education Council, was created within UHM JABSOM and called "The Hawai'i Medical Education Council" (HMEC). HMEC was given the administrative duties and powers to: (1) analyze the State healthcare workforce<sup>3</sup> for the present and future, focusing in particular on the State's need for physicians; (2) assess the State's healthcare training programs, focusing on UHM JABSOM's institutional GME enterprise to determine its ability to meet the workforce needs identified by HMEC; (3) recommend to the Legislature and UH Board of Regents (BOR) ways in which identified GME and other healthcare training programs and change in order to effectively meet the HMEC assessment; (4) work with other entities and state agencies, and in consultation with the Legislature and BOR, develop and implement a Plan to ensure the adequate funding of healthcare training programs in the State, with an emphasis on UHM JABSOM GME programs; (5) seek funding to implement the funding Plan from all public (county, state and federal government) and private sources; (6) monitor and continue to improve the funding Plan; and, (7) submit an annual report to the Legislature no later than twenty days before the convening of each regular Legislative session.
- Component #3 [HRS §304A-2164] **Hawai'i Medical Education Special Fund,** with prudence and foresight, the Legislature also passed into law HRS §304A-2164, establishing the "Hawai'i Medical Education Special Fund" into which State and Federal appropriations, and funds from government and private grants, contracts and donations could be deposited and expended for the purposes of UHM JABSOM's institutional GME program. The law also designated any money deposits into this fund as *non-lapsing* (i.e., unexpended funds by the end of the fiscal year may be carried forward for future expenditures).

<u>HMEC Membership</u> - is comprised of thirteen (13) appointed individuals listed in the Table 1 below. Five members serve ex-officio; eight are Governor-appointed. Two new members began their terms of service in April 2014: Dr. William Dubbs, succeeded Dr. James Hastings as the Federal Healthcare representative from the Veterans Administration; Dr. Allen "Chip" Hixon was appointed to succeed Dr. F. Don Parsa as the third Health Professional member of HMEC.

<sup>&</sup>lt;sup>1</sup> HRS §304A-1701, defines "Graduate Medical Education" or GME as that period of clinical training of a physician following receipt of the medical doctor (or osteopathic doctor) degree and prior to the beginning of an independent practice of medicine.

<sup>&</sup>lt;sup>2</sup> Ibid, "Graduate Medical Education Program" means a GME program accredited by the American Council on Graduate Medical Education (ACGME). UHM JABSOM has maintained full ACGME institutional accreditation.

<sup>&</sup>lt;sup>3</sup> Ibid, "Healthcare workforce" includes physicians, nurses, physician assistants, psychologists, social workers, etc.

<sup>&</sup>lt;sup>4</sup> Ibid, "Healthcare training programs" means a healthcare training program that is accredited by a nationally-recognized accrediting body.

TABLE 1 – HMEC CHAIR, MEMBERS AND STAFF									
#	Name	Appointment Dates Expiration		Term #	Representing				
1	Hedges, Jerris (Chair)	Ex-officio			N/A	Dean, UHM JABSOM			
2	Boland, Mary	Ex-officio			N/A	Dean, UHM Sch of Nursing			
3	Issell, Brian	Ex-officio (or designee)			N/A	Designee of the Director, UH Cancer Research Center			
4	Magnusson, A. Roy	Ex-officio			N/A	Assoc Dean, UHM Sch of Medicine			
5	To be named	Ex-officio			N/A	Director, Hawai'i State Dept of Health			
6	Dubbs, William		04/22/2014	06/30/2015	1	Federal Healthcare Sector, VA			
7	Hixon, Alan "Chip"		04/22/2014	06/30/2017	1	Health Professional			
8	Kajiwara, Gary	04/17/2008 07/01/2012 06/30/2015		2	Teaching Hospital				
9	McManus, Vicki	07/01/2012	07/01/2014	06/30/2017	2	General Public/Community			
10	Robbins, Kenneth	07/01/2014	07/01/2014	06/30/2017	2	Teaching Hospital			
11	Salvador, Darryl	04/23/2009	07/01/2012	06/30/2015	2	Health Professional			
12	Vitousek, Sharon	07/01/2012	07/01/2014	06/30/2015	2	Health Professional			
13	Yoshioka, Paula		07/01/2012	06/30/2015	1	Teaching Hospital			
Andrade, Naleen HMEC/GME Administrator			N/A	Professor & DIO/Dir of GME, UHM JABSOM					
Borland, Giselle		Administrative Support Staff			N/A	Executive Assistant, UHM JABSOM			

<u>HMEC/GME Administrator</u> – On March 1, 2014, UHM JABSOM Dean Dr. Jerris Hedges assigned Dr. Naleen Andrade, UHM JABSOM Designated Institutional Official (DIO) and Director of GME, to include HMEC as part of her GME administrative duties.<sup>5</sup> In this role, Dr. Andrade provides HMEC members with the needed administrative coordination and execution of the council's decisions, directives and recommendations. Dr. Andrade's role is particularly important as HMEC has continued to grow in organizational oversight, ability and influence under the stable leadership of Dean Hedges. Prior to Dean Hedges' arrival in 2008, the dean of JABSOM, who is the appointed ex-officio Chair of HMEC, had changed three times within 4 years. Dr. Andrade's specific duties as the HMEC/GME Administrator are to:

- Work in consultation with HMEC and Dean Hedges to coordinate/implement HMEC duties 2 through 7 previously described under Component #2;
- Integrate the work of HMEC with UHM JABSOM's Graduate Medical Education Committee (GMEC);<sup>6</sup>
- Oversee innovation of the Council's collective ideas; and,
- Work with Dean Hedges and UHM JABSOM fiscal staff to fully activate the Hawai'i Medical
  Education Special Fund and build its capacity to stabilize and strategically expand GME and
  healthcare training programs in Hawai'i to meet the healthcare workforce needs.

Annual Report [HRS§302A-1704] – The seventh duty of HMEC is to prepare an Annual Report to the Legislature and describe how it has and is fulfilling its duties. This year's HMEC Annual Report is organized into two parts. Part 1, Activities and Outcomes, describes the salient activities and their outcomes for 2014. Each activity and its outcome are organized under one or more of the pertinent seven (7) HMEC duties. Part 2, Recommendations to the Legislature and Board of Regents, provides the reader with the major

Obstetrics & Gynecology (ABOG)-accredited fellowship programs.

The GMEC is chaired by the DIO and is the institutional heavy that ensure

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<sup>&</sup>lt;sup>5</sup> Dr. N. Andrade served as Professor and Chair of Psychiatry (1995-2012) and officer and director of the American Board of Psychiatry and Neurology (2001-2009). She was appointed UH JABSOM Designated Institutional Official (DIO) &Director of GME on July 1, 2012, following a six-month training/transition period serving as UH JABSOM Deputy DIO. The DIO is an institutional position created in 1998 by the ACGME to oversee and direct the operations of all GME training programs within an institution. As DIO, Dr. Andrade oversees 10 ACGME-accredited residency (for primary care and other medical specialties); 8 fellowship (for subspecialties) programs; and 2 American Board of

<sup>&</sup>lt;sup>6</sup> The GMEC is chaired by the DIO and is the institutional body that ensures that UH JABSOM's GME training programs maintain substantive compliance and quality with all ACGME accreditation requirements.

recommendations HMEC sets forth to continue to develop and enhance the quality and quantity of Hawai'i's healthcare professional workforce, particularly among physicians.

# Part 1: Activities and Outcomes - Organized by HMEC Duties

Meetings & Standing Agenda Items – Four HMEC meetings were convened in 2014, on March 5, May 9, September 16, and November 14. In general, the HMEC standing agenda consists of five topics, listed below in Table 2. Each item provides members with opportunity for strategic brainstorming, synthesis, and development of specific next steps, recommendations, and/or directives to the HMEC/GME administrator.

TABLE	2 - HMEC MEETING AGENDA - STANDING ITEMS & SPECIAL PRESE	NTATIONS FOR 2014		
Item #	HMEC Agenda Items & Salient Discussion Themes	Presenter(s)		
1.	Report from HMEC Chair - Impact/outcomes of key legislation - National trends in Medical Education - HMEC activities & outcomes	Dean J. Hedges		
2.	Legislative Highlights - On GME and other healthcare professional training.	Assoc Dean A.R. Magnusson & other HMEC members		
3.	Report from Dr. Kelley Withy  - Hawai'i/Pacific Basin Area Health Education Center (AHEC) Updates  - Progress on the Healthcare Workforce Analysis  - Updates on Loan Repayment Program, "Practice in Paradise", and other physician and healthcare professional recruitment/retention programs.	Dr. K. Withy		
4.	GME Report from Dr. N. Andrade  - UHM JABSOM GME Programs updates  - Progress of HMEC initiatives and directives assigned to her.  - UHM JABSOM Annual Program Evaluations and Institutional Review	Dr. N. Andrade		
5.	Special Presentations by Selected Experts & GME Leaders (listed below by date, topic & speaker:			
	March 5, 2014 – Introduction & transition of new members & staff.	Dean J. Hedges		
	March 5, 2014 - GME Report: (1) New ACGME Accreditation System with Milestones & Clinical Learning Environment Review (CLER); (2) Strengthening of Tripler Army Medical Center (TAMC) GME Relationship; (3) How will HMEC relate to Hilo Medical Center Family Medicine Residency & TAMC?	Dr. N. Andrade		
	May 9, 2014 – Setting HMEC Priorities, for 2014, Strategic & Financial Planning & Logic Modeling for GME Programs.	Dr. N. Andrade		
	September 16, 2014 – Presentation of Program & Financial Due Diligence Report of UHM JABSOM's Triple Board Combined Residency Program in Pediatrics, General Psychiatry, and Child & Adolescent Psychiatry.	Dr. A. Guerrero, Prof & Chair of Psychiatry & Triple Board lead Program Dir; Dr. W. Haning, Prof & Psychiatry Program Dir; and Dr. S. Patel, Assoc Prof & Pediatrics Program Dir.		
	<b>November 9, 2014</b> – Health Professional Shortage Area (HPSA) Designation – Feasibility & Application for Hawai'i to secure and expand HPSA status for all shortage areas.	Dr. Catherine Sorenson, Dept of Health, Primary Care Office Director.		

#### 1. Conduct A Comprehensive Healthcare Workforce Analysis

Dr. Kelley Withy and colleagues completed their study and submitted under separate cover to the 2015 Legislature, the "Report on Findings from the Hawai'i Physician Workforce Assessment Project". With each passing year since 2009, Withy and colleagues have further refined the survey techniques and methodology that have yielded increasing levels of specificity (i.e., specialty/subspecialty data) and accuracy (e.g., FTE

shortages of practicing physicians for each island) on determining physician workforce needs. Details of Withy's report will not be presented here; however, some of the salient findings are listed below. See Withy, K. Report to the 2015 Legislature (Dec 2014) Findings from the Hawai'i Physician Workforce Assessment Project.

- Withy's latest 2014 physician workforce assessment methodology was able to focus on the actual
  full-time equivalents (FTEs) of physicians who actively practice. Therefore, the FTE shortage
  estimates on all islands are the most accurate and current physician workforce assessments
  statewide.
- Physicians providing patient care decreased from 2,894 FTEs in 2013 to 2,802 FTEs in 2014.
  Withy concluded that two reasons may likely explain this loss of nearly 100 physicians: an improving economy that supports retirement of Hawai'i's older (average age 51 years) physician workforce; and the increasing clinical practice demands for electronic health records, ICD-10, ePrescribing, etc.
- Utilizing a new projection model, the estimated shortage of physicians is 655 FTEs, which indicates a continuing shortage of 20% of physician FTEs statewide. Neighbor islands continue to have the greatest practicing physician shortages.
- The *best case* scenario for practicing physician FTEs in the year 2020 (i.e., 5 years from now) is a shortage of 800 FTEs.
- Specialty shortages of greater than 30% statewide include: Cardiothoracic Surgery, Colorectal Rectal Surgery, General Surgery, Family Medicine, Orthopaedic Surgery, and Pathology.
- Subspecialty shortages of greater than 30% statewide include: Cardiology, Infectious Disease, Neurology, Neurosurgery, Pulmonology, Rheumatology, Hematology/Oncology, Pediatric Cardiology, Pediatric Endocrinology, Pediatric Hematology/Oncology, and Pediatric Gastroenterology.

Five years ago, Withy & Sakamoto's 2009 *Physician Workforce Shortage Study* reported 2,600 practicing physicians and an overall shortage of 500 physicians. In comparison to the 2014 findings, this is an overall decrease of 294 practicing physicians and an increased physician shortage of 300. The same trends in specialty and subspecialty needs determined in 2009, have persisted. While initiatives to reverse these trends (see below) have continued to progress, two important hindering factors have been the inability for UHM JABSOM to accelerate its capacity to increase its medical student class size and the reduction of GME residency positions.

After Withy & Sakamoto's 2009 study, HMEC recommended and began the implementation of the following measures to address the shortages:

- Initiate the Physician and Health Professionals Loan Repayment Program, which is now in its 5th year of implementation with a total of 16 recipients, of which 3 have completed their payback; and 13 are providing "payback" healthcare services to designated communities in Hawai'i.
- Increase—over 10 years—the UHM JABSOM medical student class size by 40%, from 62 to 87 students per class (a total increase of 25 students over 10 years).
- Increase—over 10 years—the number of residents/fellows with UHM JABSOM GME programs by 40%, from 240 to 336 physicians-in training for primary care and other specialty and subspecialty training. This 96 physician-trainee increase would be focused on specific GME programs (both existing and newly developed programs) in which there are physician FTE shortages of 30% or more; sufficient patient volumes with which trainees are able to apply their knowledge and gain competency/proficiency in clinical skills and reasoning; and, faculty expertise to establish high quality GME training, supervision, and scholarly inquiry in these programs.

<u>Outcomes of HMEC Initiatives</u> – In addition to the success of the Loan Repayment Program, the following progress outcomes have been achieved.

- UHM JABSOM medical student class sizes have had a modest increase from 62 in 2009, to 66 in 2014. A plan is being formulated to increase medical student class size by 2 students per year for the next 10 years to reach the goal of 87 students per class.
- Table 3 below shows the status of the GME positions since 2009. UHM JABSOM GME positions went from 241 in 2009, to 221 in 2014. The decrease of 20 positions was due to: decreased funding (14 positions) from State and Private sources; and resident attrition (6 positions restored in 2015).
- Despite the overall GME positions decrease, there were gains in the Cardiology training program, which increased its class size to 7, and secured private funding to permanently expand to 9 fellows, thereby closing a critical physician shortage gap.<sup>7</sup> Notably the expansion was needed to meet the demand of a surge in patient volume.
- Table 3 also shows an upward trend for positions in calendar years 2015 and 2016 due to the restoration of the 6 positions loss to resident attrition; securing public (state and federal) and private funding to restore some positions lost to funding shortages; securing public and private funding to expand primary care positions in Family Medicine and Internal Medicine; and acquiring funding to establish new fellowships (e.g., Gastroenterology Fellowship).
- Finally, the 336 GME positions projected by the HMEC in its 2009 Report to the Legislature are 14 positions below the current projections of 322 for the year 2020 (see Table 3). These 14 positions are anticipated to be part of new core residency programs (e.g., Anesthesia and/or Neurology) and fellowship programs (e.g., Infectious Disease and/or Pulmonology) that will be strategically assessed with appropriate business plans to secure funding over the next 5 years.

Health Professionals Shortage Area (HPSA) – At the November 9, 2014 HMEC meeting Dr. Catherine Sorenson (see Table 2) provided a comprehensive review of HPSA designation. This presentation was done to assess the feasibility of expanding HPSA designation, and thereby increase the capacity for Hawai'i to recruit and retain GME graduates with National Health Service Corps Loans, Native Hawaiian Health Scholarship Loans, and H-1 Visa eligible physicians within rural and underserved sites on all major islands. According to Dr. Sorensen, the biggest barrier to HPSA designation is Physicians completing the HPSA Survey to determine: (1) Location of population in need? (2) Where physicians within the designated area are located? and, (3) Whether the population in need has access to the physicians (and dentists) within the designated area? A plan is being developed to secure funding (e.g., from UH research seed funding) to recruit high school/college students to conduct this survey within all practicing physician offices in designated rural and neighbor island areas projected to meet HPSA eligibility criteria.

# 2. <u>Conduct Assessment of Hawai'i's Healthcare Training Programs</u>

<u>UHM JABSOM GME Programs</u> – The annual assessment of all UHM JABSOM GME programs is conducted at two levels: (1) At the program-level by the Annual Program Evaluation Committees within each residency/fellowship program; and, (2) At the institutional-level by the Graduate Medical Education Committee (GMEC) and the Office of the DIO. DIO Dr. N. Andrade, reports the results of these reviews to HMEC. The Annual Institutional Review (AIR), which included all Annual Program Evaluations, was completed on October 23, 2014. The AIR reviewed the accreditation status and other GME performance indicators that ensure quality of all programs. The UHM JABSOM's Institutional Program and its 20 UHM JABSOM GME training programs are fully accredited. Our institution, 9 core residencies, 1 combined residency, and 6 fellowships received ACGME accreditation. Two fellowships (Maternal Fetal Medicine and Family Planning) received accreditation from the American Board of Obstetrics Gynecology (ABOG).

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<sup>&</sup>lt;sup>7</sup> Withy's Physician Workforce Study (2014) showed Cardiology with a 32.2% shortage. [Shortages 30% or more are considered critical].

In addition to the above assessments, two supplemental external reviews were conducted by the ACGME. The final reports and findings of both assessments will be sent by the ACGME to the DIO for distribution and review to the GMEC, HMEC and other appropriate organizations and forums involved in UHM JABSOM GME. The first supplemental review was a focused institutional accreditation site visit, which occurred on November 20-21, 2014. Preliminary feedback on this site visit was positive. The final report of this site visit will be completed and reviewed by the ACGME Institutional Review Committee in January 2015.

The second supplemental review was UHM JABSOM's first Clinical Learning Environment Review (CLER) visit that occurred December 16-17, 2014. CLER is a new program within the ACGME's new accreditation system that began on July 1, 2013. CLER focuses on quality improvement and patient safety within the teaching hospitals and clinics where GME residents and fellows train and work with patients. Every ACGME-accredited institution is given a 14-day notice after which 2 national site surveyors conduct a 2-day review of how UHM JABSOM GME leaders integrate with Hospital/Clinical executive leaders to develop high quality GME training programs that advance patient care. The CLER visit looks at six focus areas: (1) Patient Safety; (2) Quality Health Improvement & Health Disparities; (3) Supervision; (4) Transitions of Care (Patient Hand-offs); (5) Duty Hours & Fatigue Management; and (6) Professionalism. The final CLER Report will be completed by February 2015.

<u>UHM JABSOM Triple Board Combined Residency Program</u> – At the September 16, 2014 HMEC meeting the co-program directors of the Triple Board Residency Program presented their "Program and Financial Due Diligence Report" (see Table 2 above). Simultaneous budget cuts to the core Psychiatry and Triple Board Residency Programs in 2009 forced the Triple Board Program to go on hiatus from recruiting new residents from 2010 onward. The program graduated the resident who entered prior to the hiatus on June 30, 2014, and hence, the Due Diligence report was part of the process to determine if this GME training program should be continued.

Established in 1995, this combined residency training program reduces the training from 8 to 5 years to produce a physician who is able to practice and become board certified in three specialties: pediatrics, psychiatry, and child & adolescent psychiatry. During the 20 years since its founding this GME program has graduated 22 "Triple Boarders" of which 64% remain in Hawai'i and half of them practice in the public sector and/or neighbor island communities. A particular strength of this combined residency is its curriculum that prepares its graduates to practice primary care medicine along with mental and behavioral health for infants, children and youth, in addition to providing mental and behavioral health care along the entire lifespan. These graduates are able to practice medicine that is population and community based with skills to work within social systems that build bridges between schools, clinics, and hospitals.

Following the presentation, HMEC members acknowledged the value of this residency, but were concerned about the higher relative training cost. The cost of training a Triple Boarder is twice that of a primary care physician or general psychiatrist; and a third more than training a Child & Adolescent psychiatrist. However, for the funding invested in this program Hawai'i communities on the neighbor island and the public sector have benefitted significantly with 50% or more of these physicians remaining in the islands.

Healthcare indicators of effectiveness: A question was raised at the HMEC meeting if a key outcome indicator to assess the community healthcare value or effectiveness of this program was to assess if the prevalence rates of youth mental health/behavioral problems had been reduced in communities where these physicians practiced. This question could not be answered since studies have not tracked these kinds of outcomes in Hawai'i; and, no other residency/fellowship programs have collected data on these kinds of outcome indicators that would require community based epidemiological studies. Dr. Andrade was asked to explore if these kinds of healthcare indicators of effectiveness studies have been developed and conducted.

The GMEC will be making the final review of the Triple Board Residency due diligence report and making a final determination of whether or not it should be closed by its May 2015 meeting.

Hilo Medical Center GME Program – In 2013, the ACGME approved the Hilo Medical Center (HMC) Family Medicine Residency Program. Although HMC is a State government entity, it provides a separate Sponsoring Institution that is affiliated with, but <u>not</u> a part of UH or JABSOM. Discussed at the March 5, 2014 HMEC meeting, the consensus of the council members was to recommend that the 2015 Legislature consider amending HRS 304A §1703-1704 to bring HMC and its GME program(s) under the oversight and coordination of the HMEC. This would ensure statewide coordination of all State-funded GME Programs. HMEC oversight would be an important integrative body for the Hilo Medical Center and UHM JABSOM Family Medicine Residency Programs, particularly because both programs are facing severe financial pressures within their respective hospital hubs. In addition, UHM JABSOM Department of Family Medicine and UHM JABSOM could provide academic infrastructure support to the Hilo program if there was legislation to enhance a more effective partnership and economies of benefit between the two programs.

TABLE 3 – UHM JABSOM GME RESIDENT & FELLOW POSITIONS SINCE 2009 HMEC REPORT.								
UHM JABSOM GME PROGRAM	2009 Actual GME Positions	2009 Projected New Positions to Address Shortage	Current Projected Outcomes for Total GME Positions in 2020	2014 Actual GME Positions	2015 Projected GME Positions	2016 Projected GME Positions		
Core Residency Programs:								
Family Medicine (FM) <sup>A</sup>	18	18	36	18	18	22		
Internal Medicine (IM) <sup>B</sup>	58	9	67	57	58	60		
Obstetrics & Gynecology (OB/GYN)	25	0	25	24	25	25		
Orthopaedic Surgery (ORTHO)	10	5	15	10	10	10		
Pathology (PATH)	10	6	16	9	10	12		
Pediatrics (PEDS)	24	0	24	22	24	24		
Psychiatry (PSY)	28	0	28	20	23	24		
Surgery (SURG)	23	7	30	16	23	24		
Transitional – 1 Year (TY)	10	0	10	9	10	10		
Subspecialty Fellowship Programs:								
FM-Sports Medicine (SM)	1	0	1	1	1	1		
IM – Cardiovascular Disease (CVD)	6	3	9	7	8	9		
IM – Geriatric Medicine (Geri-Med)	10	0	10	9	9	9		
OB/GYN – Maternal Fetal Medicine (MFM)	1	3	3	3	3	3		
OB/GYN – Family Planning (FP)	n.a.	n.a.	2	2	2	2		
PEDS-Neonatal Perinatal (Neo-Peri)	4	0	4	4	2	2		
Combined Triple Board (PEDS-PSY-CAP)	4	0	5	0	0	1 (pending GMEC action)		
PSY-Addictions Psychiatry (Addict-PSY)	2	2	4	1	1	1		
PSY-Child & Adolescent Psychiatry (CAP)	4	2	6	5	6	6		
PSY-Geriatric Psychiatry (Geri-PSY)	1	0	1	1	1	1		
SURG-Surgical Critical Care	2	0	2	3	3	2		
EXISTING PROGRAMS TOTALS	241	55	298	221	237	250		
PROPOSED EXPANSION OF EXISTING PROGRAMS & NEW PROGRAMS FOR FY 2016:								
<sup>A</sup> FM – Expansion via FM Primary Care Consortium Rural Track	n.a.	n.a.	18	n.a.	n.a.	6		
BIM – Gastroenterology (GI)	n.a.	n.a.	6	n.a.	n.a.	1		
EXISTING & PROPOSED TOTALS	n.a.	n.a.	322	n.a.	n.a.	257		

# 3. Recommendations to the Legislature and UH Board of Regents (BOR) for GME Training Programs

As required by the ACGME, an Executive Summary of the AIR will be submitted to the BOR in January, after it undergoes its final review and approval by the GMEC on January 23, 2015. Included in the AIR Executive Summary will be the pertinent Action Items that GME leaders have been and will be undertaking to provide changes in continuous improvement of UHM JABSOM GME programs and its overall institutional GME program.

In addition to the previous paragraph, this third duty of HMEC involves recommendations to the Legislature and BOR for any changes in or additions to the GME programs. There are two significant changes to report with their accompanying recommendations:

A. UHM JABSOM Department of Family Medicine & Community Health (DFMCH) Primary Care Consortium – The DFMCH is the clinical department within which the UHM JABSOM Family Medicine Residency Program (FMRP) is situated. The faculty members within the DFMCH provide core teaching, supervision and scholarly development of FMRP residents. Both the DFMCH and FMRP are located at the Wahiawa General Hospital (WGH) and its ambulatory clinic. Due to severe financial adversity at WGH caused by a number of environmental factors beyond the control or capacity of WGH to eliminate, a business plan was proposed to establish a new primary care consortium model supported by UHM JABSOM, Hawai'i Pacific Health System (HPH), The Queen's Health System (QHS), and Hawai'i Medical Service Association (HMSA). This plan was revised and implemented at the close of 2014.

Ironically, while the State Legislature has appropriated over \$2 million in general funds to the Hilo Medical Center to establish a new, untested Family Medicine Residency Program that will train a total of 12 residents by FY 2017, during the same time frame it did not provide funding to either the UHM JABSOM FMRP or Wahiawa General Hospital (WGH), the teaching hospital that is struggling mightily to fund the existing and nationally recognized primary care GME program. <sup>9</sup>

The DFMCH Family Medicine Primary Care Consortium provides a model within which small rural hospitals like WGH can partner with larger healthcare systems such as HPH and QHS, and HMSA, Hawai'i's largest healthcare insurer to: (1) collectively stabilize the GME financial operations that brings quality healthcare to rural areas, and (2) establish the capacity to strategically expand the number of well-trained primary care Family Medicine physicians serving Hawai'i's rural communities on all major islands with demonstrated physician shortages.

❖ RECOMMENDATION #1 – UHM JABSOM/HMEC recommends that the Legislature appropriate \$2,000,000 for FY 2016 and \$2,000,000 for FY 2017 to match the private funding provided to the DFMCH Primary Care Consortium. This appropriation shall be placed in the Hawai'i Medical Education Special Fund. HMEC shall work with the DFMCH and FMRP to disburse these funds to maintain the stability of the existing residency program and support the expansion of the FMRP by 4 resident positions and provide the needed faculty, staff and clinical learning environment infrastructure support to sustain this expansion.

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<sup>&</sup>lt;sup>8</sup> The UH JABSOM DFMCH Business Plan Proposal (July 2014) and its Business Plan Addendum (October 2014) were developed and written by a team of UH JABSOM DFMCH, FMRP, and Office of the DIO leaders in consultation with the WGH CEO.

<sup>&</sup>lt;sup>9</sup> The UH JABSOM DFMCH and its FMRP were established in 1992 within WGH. Up until this past year, when financial pressures have been rising precipitously, WGH has provided an average of \$2M per year to fund both the DFMCH faculty and FMRP. The UH JABSOM DFMCH is ranked 25<sup>th</sup> out of 130 U.S. allopathic medical schools with departments of FMCH (Reference: American Academy of Family Physicians. *Admissions Guide pp. 6-7.*) Each year, an average of 12% of JABSOM graduates chose to enter this GME program. Over the 23 years since its founding this UH JABSOM Family Medicine GME program has produced 111 family medicine physicians: 52% are graduates of JABSOM; and 14% are Native Hawaiian. Seventy percent (78 of 111) have remained in Hawai'i to practice and of these, nearly half practice in rural areas on O'ahu and the neighbor islands.

**B.** Internal Medicine Gastroenterology (GI) Fellowship – An application to establish a 3-year GI Fellowship is being prepared and will be submitted in March 2015 to the ACGME. Withy's 2014 *Physician Workforce Study* showed Gastroenterology physicians shortage at 15.3%. However, anecdotal reports by practitioners estimate the percent shortage is nearly doubled for patients without health insurance and those insured by Medicaid/Medicare who have significantly reduced access to GI specialists. Private funding for 1 resident per year has been secured. A plan to develop a dedicated UHM JABSOM faculty cohort is underway to provide the required clinical and scholarly faculty is underway. It is likely that a future HMEC recommendation to the Legislature and BOR will include a request for faculty and/or staff infrastructure support to augment the private funding to increase the GME positions to 2 fellows per year, along with physician faculty FTE.

### 4. Develop Plan to Ensure Adequate Funding of Healthcare Training Programs

Brief Historical Context – Up until the present, UHM JABSOM has <u>not</u> developed a comprehensive two-part Strategic and Financial Plan that would develop a process by which government (State and Federal) funding and private (Teaching Hospitals and Foundations) funding would be dedicated for GME training. The reasons for this are multiple, but primarily due to UHM JABSOM not having a University Hospital. Lacking a University Hospital since its founding in 1965, UHM JABSOM has worked with core community teaching hospitals to establish a complex network of public-private affiliation agreements to recruit, employ, educate and train residents/fellows. In 1982, the teaching hospitals established the Hawai'i Residency Program, Inc. (HRP), a 501(c)(3) non-profit corporation that has served as the administrative and fiscal entity through which these hospitals could pool their GME funds to employ residents/fellows, along with the administrative staff and infrastructure for this component of GME operations. UHM JABSOM is a member of the HRP board and provides funding for teaching faculty members and some administrative staff support. UHM JABSOM also covers other educational expenses (e.g., simulation lab training, visiting professorships, etc.). Historically, the 2007 HMEC legislation was an attempt to begin the process of redefining the relationship between UHM JABSOM and HRP with the goal of achieving greater alignment and seamlessness between these two distinct and inter-dependent organizations.

<u>UHM JABSOM & HRP Organizational Alignment</u> – In June 2012, UH and HRP entered into a formal agreement that aligned HRP and UHM JABSOM and established the Office of the DIO (ODIO) within the Dean's Office. An essential change brought about by this re-alignment was the July 1, 2012 inaugural appointment of a senior UHM JABSOM faculty member with experience in academic administration, GME, management, governance, and strategic, business and financial planning to serve as DIO.

The ODIO is directed by Dr. N. Andrade and is made up of the following executive leaders: Mr. Richard Philpott, HRP CEO; Ms. Marlene Keawe, HRP COO; Dr. Richard Kasuya JABSOM Associate Dean of Medical Education; and Dr. Roy Magnusson, JABSOM Associate Dean of Clinical Affairs. The 2012 *UH & HRP JABSOM GME Agreement* also established a 12-member GME Advisory Council made up of representatives from HRP and UHM JABSOM, including a GMEC member representative. This advisory council advises the DIO and GMEC on all issues related to strengthening the UHM JABSOM GME Enterprise. This new organizational alignment has catalyzed greater integration and ushered in the capacity for strategic and financial planning that generates resources to secure and sustain three essential components for a high quality GME Enterprise: (1) Resident & Fellows; (2) Faculty & Staff; and (3) Clinical Learning Environments, i.e., teaching hospitals, clinics, and community-based healthcare sites.

<u>Funding Needs to be met by GME Strategic & Financial Plans</u> – Historically since the mid-1960s, when accredited GME training programs were established in Hawai'i, funding for residency and fellowship training came from two sources: Teaching Hospitals' operating funds and Federal GME reimbursements from the Center for Medicaid/Medicare Services (CMS).

• Currently, CMS has approved reimbursement for about 164 resident positions in the teaching hospitals with UHM JABSOM GME programs. The number 164 is referred to as the "undercapped positions" set point. This means that all resident/fellow positions above this CMS set

point are entirely paid from private funds generated by teaching hospitals' operating funds, public (State and Federal contracts/grants), and from private foundations.

- Raising the number of CMS under-capped positions can only occur when CMS approves a
  teaching hospital that does not have an established GME program, to receive new CMS GME
  reimbursements.<sup>10</sup>
- Presently, CMS GME-direct reimbursements provide about 70% of the total salary for each of the existing undercapped 164 UHM JABSOM resident positions. Hawai'i's teaching hospitals pay the 30% shortfall for these resident positions from their operating budgets.
- The decreasing CMS support for GME combined with the impact of implementing the U.S. Affordable Care Act healthcare reform has placed a financial burden on Hawai'i's teaching hospitals that is making it impossible for these institutions to continue to carry this GME burden alone.
- The Family Medicine Primary Care Consortium Business Plan Proposal, described in the previous section, requires matching legislative funding to meet strategically designated physician specialty/subspecialty shortages. Similar GME Strategic and Financial Plans are being developed by GME leaders for HMEC review and support in other need areas.
- At the May 9, 2014 HMEC meeting, Dr. N. Andrade reviewed with HMEC members her proposed strategic and financial planning process, which uses Logic Modeling to establish performance metrics, and track the development, implementation, outcomes, and ongoing modifications and improvements of these plans. This proposed process will be used for 2015 HMEC activities that include funding recommendations to the Legislature and BOR.

#### 5. Seek Funding for Plan From Public & Private Sources

GME funding from private sources, particularly Hawai'i's private teaching hospitals/clinics, has been the established rule for UHM JABSOM's GME Enterprise. The rapidly changing healthcare financial environment, that is limiting the capacity of teaching hospitals/clinics to fund GME training, makes it imperative for the Legislature to create an annual "GME Appropriation" to close the widening gap of physician shortages in Hawai'i. HMEC recommends that beginning in FY 2016, State government begin to share GME costs with private teaching hospitals/clinics to ensure high quality healthcare for all Hawai'i citizens.

Hawai'i State Government has not yet established a dedicated annual GME appropriation to UHM JABSOM, its only State University Medical School. This is in contrast to the majority of State-funded University Medical Schools across the U.S. that have dedicated State government appropriations for GME training programs that have demonstrated community need and limited ability to be financially self-sustaining, such as in the primary care specialties and other specialties/subspecialties located in sparsely populated rural and urban communities on neighbor islands.

Establishing a GME Appropriation that is placed within the Hawai'i Medical Education Special Fund and overseen by HMEC at this time is financially and strategically sound for the following reasons: (1) Improved accuracy and specificity of Withy's *Physician Workforce Study* of actual and projected physician needs; (2) Alignment of UHM JABSOM and HRP with Hawai'i's complex GME system of public/private institutions teaching hospitals/clinics that enhances seamlessness between HMEC and UHM JABSOM's GME Enterprise; and, (3) Development and implementation of the UHM JABSOM Family Medicine Primary Care Consortium (see sections 3&4 above) that represents a new approach that provides the Legislative and

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<sup>&</sup>lt;sup>10</sup> Hilo Medical Center (HMC) is an example of a teaching hospital that has applied to CMS for reimbursements for their GME trainee positions. If approved, these CMS funds will support at least 70% of the cost to resident salaries and other GME educational costs now paid by the State.

Executive branches of State Government with an annual GME funding request that is supported by strategic and business plans with programmatic and financial performance outcomes by which the success can be measured.

❖ RECOMMENDATION #2 – UHM JABSOM/HMEDC recommends that the 2015 State Legislature establish an annual GME Appropriation to fund designated residency and fellowship programs within the UHM JABSOM institutional GME program. These appropriation requests are contingent on UHM JABSOM GME Strategic & Business Plan Proposals that are reviewed and endorsed by HMEC. The appropriated funds shall be placed within the Hawai'i Medical Education Special Fund. HMEC shall work with the designated UHM JABSOM clinical departments and GME programs to disburse these appropriated funds to achieve the goals, objectives and outcomes outlined in the strategic & financial plans.

The appropriations included in Recommendations #1 above, would be the first appropriations to establish this annual "GME Appropriation". Every effort shall be made by GME leaders to have State Funding be complemented by federal/county government and private funding to ensure financial stability, continued high quality performance, and appropriate strategic growth of UHM JABSOM's GME programs.

# 6. <u>Monitor the Implementation and Effectiveness of the Funding Plan</u>

The Family Medicine Primary Care Consortium (FY 2016 - FY 2017) is the Funding Plan that UHM JABSOM is proposing for the 2015 Legislature to consider funding. Monitoring the implementation and Effectiveness of this plan will follow a thoughtful evaluation process that assesses the process and outcome objectives, GME quality indicators, and financial cost-benefit. The evaluation process is contained in Appendix B.

#### Part 2: Recommendations to the Legislature and UH Board of Regents

HMEC proposes four (4) recommendations to the 2015 Legislature and UH Board of Regents:

- ❖ RECOMMENDATION #1 RECOMMENDATION #1 UHM JABSOM/HMEC recommends that the Legislature appropriate \$2,000,000 for FY 2016 and \$2,000,000 for FY 2017 to match the private funding provided to the DFMCH Primary Care Consortium. This appropriation shall be placed in the Hawai'i Medical Education Special Fund. HMEC shall work with the DFMCH and FMRP to disburse these funds to maintain the stability of the existing residency program and support the expansion of the FMRP by 4 resident positions and provide the needed faculty, staff and clinical learning environment infrastructure support to sustain this expansion. *Refer to p. 9-10*.
- ❖ RECOMMENDATION #2 UHM JABSOM/HMEC recommends that the 2015 State Legislature establish an annual GME Appropriation to fund designated residency and fellowship programs within UHM JABSOM's institutional GME program. These appropriation requests are contingent on UHM JABSOM GME Strategic & Business Plan Proposals that are reviewed and endorsed by HMEC. The appropriated funds shall be placed within the Hawai'i Medical Education Special Fund. HMEC shall work with the designated UHM JABSOM clinical departments and GME programs to disburse these appropriated funds to achieve the goals, objectives and outcomes outlined in the strategic & financial plans. *Refer to pp. 12-13*.
- ❖ RECOMMENDATION #3 The HMEC/GME Administrator shall complete the plan and seek funding from existing UH-Mānoa funding and/or private seed grant funding to conduct the HPSA Physician Survey using high school/college students interested in Healthcare Professional careers as surveyors. The information from this survey will be used to determine the eligibility for HPSA

- designation. Following this determination, the HMEC will develop a work group to work with Dr. Sorenson to complete the HPSA designation for all eligible locales. *Refer to p. 7*.
- ❖ RECOMMENDATION #4 UHM JABSOM/HMEC recommends that the 2015 State Legislature amends HRS §304A-1703 1704, to include Hilo Medical Center as part of the "Medical Education Council" and "Council Duties". These amendments would enhance the capacity to focus the strategic and financial planning for all State-funded GME programs. Appropriate allocations for the Hilo Medical Center based Family Medicine Residency Program can be made to the Hawai'i Medical Education Special Fund. *Refer to p. 8-9*.

#### APPENDIX A – State Statutes Related to HMEC

HRS excerpts below downloaded December 22, 2014 from:

http://www.capitol.hawaii.gov/hrscurrent/Vol05 Ch0261-0319/HRS0304A/HRS 0304A-1701.htm

#### CHAPTER 304A UNIVERSITY OF HAWAII SYSTEM

Part I. System Structure

Section

Part IV. Divisions, Departments, and Programs

J. Medical Education Council

304A-1701 Definitions

304A-1702 Graduate medical education program

304A-1703 Medical education council

304A-1704 Council duties

304A-1705 Council powers

#### J. MEDICAL EDUCATION COUNCIL

#### [§304A-1701] Definitions. As used in this subpart:

"Centers for Medicaid and Medicare Services" means the Centers for Medicaid and Medicare Services within the United States Department of Health and Human Services.

"Council" means the medical education council created under section [304A-1703].

"Graduate medical education" means that period of clinical training of a physician following receipt of the medical doctor degree and prior to the beginning of an independent practice of medicine.

"Graduate medical education program" means a graduate medical education training program accredited by the American Council on Graduate Medical Education.

"Healthcare training program" means a healthcare training program that is accredited by a nationally-recognized accrediting body. [L 2006, c 75, pt of §2]

[§304A-1702] Graduate medical education program. (a) There is created a graduate medical education program to be administered by the medical education council in cooperation with the department of health.

- (b) The program shall be funded with moneys received for graduate medical education and deposited into the Hawaii medical education special fund established under section [304A-2164].
  - (c) All funding for the graduate medical education program shall be nonlapsing.
  - (d) Program moneys shall only be expended if:
  - (1) Approved by the medical education council; and
  - (2) Used for graduate medical education in accordance with sections [304A-1704] and [304A-1705]. [L 2006, c 75, pt of  $\S2$ ]

[§304A-1703] Medical education council. (a) There is established within the University of Hawaii, the medical education council consisting of the following thirteen members:

- (1) The dean of the school of medicine at the University of Hawaii;
- (2) The dean of the school of nursing and dental hygiene at the University of Hawaii;
- (3) The vice dean for academic affairs at the school of medicine who represents graduate medical education at the University of Hawaii;
- (4) The director of health or the director's designated representative;
- (5) The director of the Cancer Research Center of Hawaii; and
- (6) Eight persons to be appointed by the governor as follows:
  - (A) Three persons each of whom shall represent a different hospital at which accredited graduate medical education programs are conducted;
  - (B) Three persons each [of] whom represent the health professions community;
  - (C) One person who represents the federal healthcare sector; and
  - (D) One person from the general public.

- (b) Except as provided in subsection (a)(1), (2), (3), and (4), no two council members may be employed by or affiliated with the same:
  - (1) Institution of higher education;
  - (2) State agency outside of higher education; or
  - (3) Private entity.
  - (c) Terms of office of council members shall be as follows:
  - (1) Except as provided in paragraph (2), the dean of the school of medicine, dean of the school of nursing and dental hygiene, vice dean for academic affairs of the school of medicine at the University of Hawaii, and the director of health, or the director's designated representative, shall be permanent ex officio members of the council, and the remaining nonpermanent council members shall be appointed to four-year terms of office;
  - (2) Notwithstanding paragraph (1), the governor at the time of the initial appointment shall reduce the terms of four nonpermanent council members to two years to ensure that approximately half of the nonpermanent council members are appointed every two years; and
  - (3) If a vacancy occurs in the membership for any reason, the replacement shall be appointed by the governor for the unexpired term in the same manner as the original appointment was made.
- (d) The dean of the school of medicine at the University of Hawaii shall chair the council. The council shall annually elect a vice chair from among the members of the council.
- (e) All council members shall have voting rights. A majority of the council members shall constitute a quorum. The action of a majority of a quorum shall be the action of the council.
- (f) Per diem and expenses incurred in the performance of official duties may be paid to a council member who:
  - (1) Is not a government employee; or
  - (2) Is a government employee, but does not receive salary, per diem, or expenses from the council member's employing unit for service to the council.

A council member may decline to receive per diem and expenses for service to the council. [L 2006, c 75, pt of  $\S2$ ]

#### [§304 $\lambda$ -1704] Council duties. The medical education council shall:

- (1) Conduct a comprehensive analysis of the healthcare workforce requirements of the State for the present and the future, focusing in particular on the State's need for physicians;
- (2) Conduct a comprehensive assessment of the State's healthcare training programs, focusing in particular on graduate medical education programs and their role in and ability to meet the healthcare workforce requirements identified by the council;
- (3) Recommend to the legislature and the board of regents changes in or additions to the healthcare training programs in the State identified by the council's assessment;
- (4) Work with other entities and state agencies as necessary, develop a plan to ensure the adequate funding of healthcare training programs in the State, with an emphasis on graduate medical education programs, and after consultation with the legislature and the board of regents, implement the plan. The plan shall specify the funding sources for healthcare training programs and establish the methodology for funding disbursement. Funds shall be expended for the types of costs normally associated with healthcare training programs, including but not limited to physician salaries and other operating and administrative costs. The plan may include the submission of an application in accordance with federal law for a demonstration project to the Centers for Medicaid and Medicare Services, for the purpose of receiving and disbursing federal funds for direct and indirect graduate medical education expenses;
- (5) Seek funding from public sources, including state and federal government, and private sources to support the plan required in paragraph (4);
- (6) Monitor the implementation and effectiveness of the plan required in paragraph (4), making such modifications as may be required by future developments and changing needs and after consulting with the legislature and the board of regents, as appropriate; and

(7) Submit a summary report to the legislature no later than twenty days before the convening of each regular session, of the expenditures of program moneys authorized by the council under this subpart. [L 2006, c 75, pt of §2]

#### [§304A-1705] Council powers. The medical education council may:

- (1) Conduct surveys, with the assistance of the department of health and the department of commerce and consumer affairs, to assess and meet changing market and education needs;
- (2) Appoint advisory committees of broad representation on interdisciplinary clinical education, workforce mix planning and projections, funding mechanisms, and other topics as is necessary;
- (3) Use federal moneys for necessary administrative expenses to carry out its duties and powers as permitted by federal law;
- (4) Distribute program moneys in accordance with this subpart; provided that any expenditures authorized shall be for a public purpose and shall not be subject to chapters 42F, 103, 103D, and 103F;
- (5) Hire employees not subject to chapters 76 and 89 necessary to carry out its duties under this subpart; and
- (6) Adopt rules in accordance with chapter 91, necessary to carry out the purposes of this subpart. [L 2006, c 75, pt of §2]

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http://www.capitol.hawaii.gov/hrscurrent/Vol05 Ch0261-0319/HRS0304A/HRS 0304A-2164.htm

[§304A-2164] Hawaii medical education special fund. There is established a Hawaii medical education special fund, into which shall be deposited all funds received by the medical education council, including:

- (1) Moneys from the federal Centers for Medicaid and Medicare Services or other federal agencies;
- (2) State appropriations; and
- (3) Grants, contracts, donations, or private contributions.

The fund shall be administered by the university. Moneys deposited in the fund shall be expended by the university for the purposes of the graduate medical education program established under section [304A-1702]. [L 2006, c 75, pt of §2]

# APPENDIX B – Evaluation Procedures of Proposed Funding Plan

I. The Family Medicine Primary Care Consortium Plan will be evaluated in two ways. The first is via the Annual Residency Program Evaluation and Annual Institutional Review previously described. The second evaluation will assess the outcomes of the Consortium Business Plan. Below is an excerpt from pp. 18-19 of the UHM JABSOM DFMCH Business Plan Proposal that describes the Evaluation of the effectiveness of the Consortium Model:

## Evaluation of Project and Refinement of Consortium Model

The Consortium should be seen as a work in progress whereby the members are able to use evaluation of the senior managers' abilities to lead the DFMCH faculty physicians and staff to successfully execute the plan of Procedures, Activities and Tasks (PATs). The method of evaluation will be thorough, feasible, and appropriate for the specific aims, PATs, and outcomes of this project. Feedback from this evaluation process will be used to make necessary refinements and changes to the Consortium model and its PATs to ensure successful execution of its planned activities. The primary components are delineated below:

- 1. Evaluation Team & Responsibilities: The project's performance in meeting the specific aims, PATs, and outcomes ... will be evaluated by a seven (7) member Evaluation Team consisting of Dr. Allen "Chip" Hixon, DFMCH Chair, Dr. Lee Buenconsejo-Lum, DFMCH Vice-Chair and FM Residency Program Director, Ms. Shari Tasaka, UCERA Practice Development Officer, Wally Izumigawa, DFMCH Director of Business Affairs, Dr. Jerris Hedges, UHM JABSOM Dean, Mr. Don Olden, WGH CEO, and Dr. Roy Magnusson, UCERA Interim CEO.
- 2. Evaluation Plan Design: Each Specific Aim and Major Outcome will be dissected in terms of the following evaluation types:
  - a. <u>Process</u> (i.e., activities that must occur for successful completion of the project, such as proper program development/implementation/fidelity, solidified management plans/meetings, timely decision-making, effective logistical support, personnel training/management, fiscal accountability, professional ethics);
  - b. <u>Effort</u> (i.e., number of patients who are served and for whom effective measures of quality completion of medical records, billings, coding, etc. are completed);
  - c. <u>Effectiveness</u> (i.e., service actually made a positive difference, such as increasing academic cognitive knowledge, skills and attitudes among faculty, residents and staff, hitting the projected outcomes for clinical procedures);
  - d. <u>Cost-Benefit Analysis</u> (i.e., overall benefits outweigh the resource/monetary cost of the service).
  - e. The following will be completed as part of the Evaluation Plan:
    - i. Quarterly: All of the specific aims, PATs and outcomes will be monitored and the progress of each will be conveyed to the DFMCH WGH/PCM faculty and staff by the Evaluation Team. This will assure "real-time" feedback and immediate modifications in the implementation of the project, if necessary. In addition, a quarterly report will be given to the Consortium members by Dr. Hixon, DFMCH Chair. The evaluation reports of Quarters 3 and 4 will be used to plan for the subsequent project year, in addition to establishing the funding levels for that subsequent year.
    - ii. <u>End-of-Year</u>: An annual report will be completed at the end of each fiscal year and submitted to the Consortium members. This summative evaluation will be used, along with the quarterly formative evaluation to make the necessary refinements and/or changes to the Consortium model and activities to assure success.