Committee Membership:
Jose J. Armas, Chair; Sukrit Agrawal; Cesar L. Alvarez; Jorge L. Arrizurieta; Claudia Puig

AGENDA

1. Call to Order and Chair's Remarks
   Jose J. Armas

2. Approval of Minutes
   Jose J. Armas

3. Academic Health Center (AHC) Report
   • Integration of FIU Student Health Services with the FIU Health Care Network
     Yolangel Hernandez Suarez

4. Information Items (No Action Required)
   4.1 School of Integrated Science and Humanity Update
     Suzanna Rose
   4.2 Herbert Wertheim College of Medicine Update
     John A. Rock
   4.3 Nicole Wertheim College of Nursing and Health Sciences Update
     Ora Strickland
   4.4 Robert Stempel College of Public Health and Social Work Update
     Mark Williams
   4.5 FIU Health | Student Health Services Update
     Yolangel Hernandez Suarez
   4.6 Board of Governors Health Initiatives Committee Workshop
     John A. Rock

5. New Business (If Any)
   Jose J. Armas

6. Concluding Remarks and Adjournment
   Jose J. Armas

The next Health Affairs Committee Meeting is scheduled for Thursday, September 10, 2015
Approval of Minutes

Date: June 3, 2015

Subject: Approval of Minutes of Meeting held January 14, 2015

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Proposed Committee Action:
Approval of Minutes of the Health Affairs Committee meeting held on Wednesday, January 14, 2015 at the Modesto A. Maidique Campus, Graham Center Ballrooms.

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Background Information:
Committee members will review and approve the Minutes of the Health Affairs Committee meeting held on Wednesday, January 14, 2015 at the Modesto A. Maidique Campus, Graham Center Ballrooms.
1. Call to Order and Chair’s Remarks
The Florida International University Board of Trustees’ Health Affairs Committee meeting was called to order by Committee Chair Jose J. Armas at 11:44 am on Wednesday, January 14, 2015, at the Modesto A. Maidique Campus, Graham Center Ballrooms.

The following attendance was recorded:

Present
Jose J. Armas, Chair
Sukrit Agrawal
Jorge L. Arrizurieta
Robert T. Barlick, Jr.
Claudia Puig

Excused
Michael M. Adler, Vice Chair
Cesar L. Alvarez

Trustees Alexis Calatayud and Kathleen L. Wilson, and University President Mark B. Rosenberg were also in attendance.

Health Affairs Committee Chair Jose J. Armas welcomed all Trustees, University faculty and staff to the meeting. He noted that in September the Board adopted new Bylaws, which revised the Board’s Committee structure to create a Health Affairs Committee.

2. Approval of Minutes
Committee Chair Armas asked that the members approve the Minutes of the meeting held on September 10, 2014. A motion was made and passed to approve the Minutes of the Health Affairs Task Force Meeting held on Wednesday, September 10, 2014.

3. Academic Health Center (AHC) Reports
3.1 AHC Proposed Governance
Dean and Senior Vice President for Health Affairs Dr. John A. Rock provided an overview of the FIU AHC Proposed Governance noting that the proposed organizational structure sets the strategic direction and leads operations for the AHC. Senior VP Rock stated that he would share responsibility with Provost and Executive Vice President Kenneth G. Furton to oversee five
colleges within the AHC and added that the proposed structure is well suited to meet the challenges and opportunities of the AHC within the University.

3.2 Integration of FIU Student Health Services with the FIU Health Care Network

Associate Dean for Graduate Medical Education and Chief Executive Officer of FIU Health Dr. Yolangel Hernandez-Suarez, provided an update on the Integration of FIU Student Health Services with the FIU Health Care Network. She reported that a proposed model of care has been developed in consultation with key stakeholders in order to implement integrated approaches to deliver student health services. She stated that the model consists of four distinct but interrelated pillars that provide a strong foundation for supporting and promoting student learning and academic success while addressing school health in a well planted and integrated manner. She presented an implementation timeline, noting that full integration was expected for July 2015.

3.3 Emergency Response Capabilities of the Mobile Van Fleet FIU DART (Disaster Assistance Response Teams)

Assistant Vice President for Disaster Management and Emergency Operations, Ruben Almaguer, provided an overview of the disaster assistance response team (DART), noting that DART is a 35-member response team comprised of professional and para-professional medical personnel from the University. He stated that the University developed DART as a method of providing rapid response assistance with capabilities of local, state, domestic and international development. He added that DART is fully operational within the first 24 hours of a crisis and maintains round-the-clock proper staffing levels. He noted that FIU’s DART is unique to the State University System of Florida.

4. Information Items

Committee Chair Armas requested that the reports within the Information Items be accepted as written. There were no objections.

5. New Business

No new business was raised.

6. Concluding Remarks and Adjournment

Chairman of the Department of Humanities, Health, and Society of the Herbert Wertheim College of Medicine, Pedro Greer, provided an overview of the mobile health services being offered to the community. He stated that they currently have three operational buses that provide services in grossly underserved areas; two clinical busses and one 3D mammogram bus; noting that this is the first 3D bus in the state. He also noted that in addition to providing services to the community the busses also function as clinical rotation sites for students.

Committee Chair Armas stated that at the last meeting, a tour of the mobile health vans was requested and noted that the tour would be offered to the Trustees at the Full Board meeting.

With no other business, Committee Chair Jose J. Armas adjourned the meeting of the Florida International University Board of Trustees Health Affairs Committee on Wednesday, January 14, 2015 at 12:20 p.m.
### Trustee Requests

<table>
<thead>
<tr>
<th>Trustee Requests</th>
<th>Follow-up</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Committee Chair Armas requested that Dr. Hernandez-Suarez continue to provide updates on the progress of the integration of FIU Student Health Services with the FIU Health Care Network.</td>
<td>Associate Dean for Graduate Medical Education and Chief Executive Officer of FIU Health Dr. Yolangel Hernandez-Suarez</td>
<td>Ongoing</td>
</tr>
<tr>
<td>2. Committee Chair Armas requested that Student Health remain a standing item on the Health Affairs Committee Agenda.</td>
<td>Dean and Senior Vice President for Health Affairs Dr. John A. Rock</td>
<td>Ongoing</td>
</tr>
</tbody>
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C.S. 02.03.15
The School of Integrated Science and Humanity (SISH) was established in 2009 by the College of Arts and Sciences to provide a multi-disciplinary home for the study of health-themed sciences such as biochemistry, biophysics, behavioral science, cognitive and neurosciences. The following provides an update of recent health-related initiatives of the School.

BIOMOLECULAR SCIENCES INSTITUTE (BSI)
Director: Dr. Yuk Ching Tse-Dinh

External partnership for technology development and transfer has been recommended by the Advisory Board to be one of the strategic focuses of the Biomolecular Sciences Institute. Several BSI faculty members are collaborating with the Torrey Pines Institute for Molecular Studies in drug discovery. Results from the collaborations involving Drs. Yuk-Ching Tse-Dinh and Jeremy Chambers were presented at the Florida Drug Discovery Acceleration Program Collaborator Conference on January 23, 2015 in Port St. Lucie, FL. Drs. Yuk-Ching Tse-Dinh, Yuan Liu, and Irina Agoulnik received a $50,000 grant from the Community Foundation of Broward to fund the first year of a two-year project to investigate prostate cancer treatment. The collaborative team of BSI faculty will explore new leads for drug treatments of prostate cancer resistant to conventional treatment. The BSI has also received commitment of $75,000 from a private donor to support the exploration of novel therapy concepts and personalized approaches in glioblastoma treatment.

CENTER FOR CHILDREN AND FAMILIES (CCF)
Director: Dr. William Pelham

The Center for Children and Families is a multidisciplinary team of researchers and service providers committed to improving the lives of children suffering from mental health problems and their families. The CCF is the leading provider of evidence-based services for children with Attention-deficit/hyperactivity (ADHD) disorder in Miami and has served more than 2,500 families. The Summer Treatment Program (STP) served 242 South Florida children in the summer of 2014 and another 1086 Families during the 2013-14 academic year (AY), 776 of whom were enrolled in clinical research projects. For AY 2013-14, the CCF produced over 100 peer-reviewed articles. Grant expenditures exceeded $9.75M, mostly federal grants with full indirect costs. Awarded grants since
August 2014 include a National Institute on Drug Abuse (NIDA) funded R01 examination of teens with ADHD and Substance Use, an American Psychology Law Society grant and American Psychological Foundation funding for an overall total of $2,759,343. The CCF will hosted its 8th Biennial Conference, Niagara in Miami, February 25-27, 2015. The conference attracts more than 350 mental health professionals from across the U.S.

COGNITIVE NEUROSCIENCE AND IMAGING CENTER (CNIC)
Director: Dr. Angela Laird

The proposed Cognitive Neuroscience and Imaging Center (CNIC) is a multidisciplinary group of faculty focusing on mental processes in the healthy and diseased human brain across the lifespan. Since August, CNIC faculty members were awarded a research grant from the National Science Foundation (NSF) to study the neural mechanisms associated with Science, Technology, Engineering and Math STEM learning and how students develop critical thinking and problem solving skills. CNIC cross-campus collaborations are continuing to initiate projects investigating the neural correlates of Latino substance abuse (CRUSADA), the relation between alcoholism and chronic pain (Public Health), and the development of bio-signatures for adverse psychiatric outcomes in sports-related concussion (FIU Athletics). Pilot data are being collected for these emerging projects, which will be included in multiple federal grant proposals to be submitted in 2015.
DR. ROCK APPOINTED TO LCME
The nominating committee of the Liaison Committee on Medical Education (LCME) unanimously voted to appoint HWCOM Founding Dean and Senior Vice President for Health Affairs, John A. Rock, M.D., as an LCME member. The LCME is recognized by the U.S. Department of Education as the reliable authority for the accreditation of medical education programs leading to the M.D. degree.

NEW PSYCHIATRY RESIDENCY PROGRAM
Citrus Health Network (CHN), in partnership with the Department of Psychiatry & Behavioral Health (DOPBH) at the (HWCOM), has received accreditation for a new residency program in psychiatry. On February 13, 2015 the Psychiatry Residency Review Committee of the Accreditation Council for Graduate Medical Education (ACGME) approved 16 residency positions at CHN. The novel training program will be the first ACGME accredited psychiatry residency program in the country hosted by a Federally Qualified Health Center. FIU faculty was crucial to the accreditation process and will be actively involved in the residency program.

3D MOBILE MAMMOGRAPHY CENTER
Thanks to a $1.1 million grant from the Braman Family Foundation, and a matching grant from the Batchelor Foundation, the Linda Fenner 3D Mobile Mammography Center began seeing patients in November. The program offers the latest technology in breast screening as well as follow up care to women enrolled in our NeighborhoodHELP™ program.

DR. MARTY HONORED AS ONE OF SOUTH FLORIDA’S MOST INFLUENTIAL WOMEN
HWCOM Professor Aileen Marty, M.D., who returned earlier this year from a second Ebola fighting mission to Africa with the World Health Organization, was chosen as one of ten women to receive the “In the Company of Women Award”. The annual award honors outstanding local women leaders during Women’s History Month. Dr. Marty, a graduate of the U.M. School of Medicine was chosen by the U.M. medical alumni as their 2015 Hall of Fame Award Honoree.
TWO HWCOM GRADS FINALISTS FOR HYPE MIAMI AWARDS
The HYPE Miami Awards presented annually by the Greater Miami Chamber of Commerce recognize up-and-coming young professionals who have demonstrated outstanding achievements. This year, two of the finalists for The Most Valuable Graduate (MVG) Award – Jinny Gunn, M.D., and Edilberto Alvarez, M.D. – are recent graduates of the FIU Herbert Wertheim College of Medicine Class of 2014.

DR. ROSEN NAMED AAAS FELLOW
HWCOM Distinguished Professor, Barry Rosen, Ph.D., has been awarded the distinction of Fellow of the American Association for the Advancement of Science (AAAS), in recognition for “distinguished contributions to the field of arsenic biology, particularly seminal discoveries on mechanisms of arsenic transport, biotransformation, and regulation in organisms from *E. coli* to humans.”

DR. GILLIS APPOINTED TO BOARD OF WORLD-RENNOWN BIOETHICS THINK TANK
HWCOM Associate Professor, Marin Gillis, Ph.D., has been appointed to the Board of Directors of the Global Bioethics Initiative (GBI), a United Nations-associated NGO dedicated to improving quality of life in vulnerable populations around the world, through research, education, and policy change recommendations.
FIU’s RN-to-BSN Online Program Ranks Number 40 in the Nation
After reviewing the nearly 400 online RN-to-BSN programs offered in the U.S., FIU's RN-to-BSN Program was ranked number 40 and was chosen as providing one of the best online classroom experiences by RNtoBSN.org. The ranking list is the most rigorous of its kind, based on data from a wide range of sources, including IPEDs, institution websites, and state nursing boards. Factors considered were accreditation, commitment to online education, academic and career counseling services, and academic quality. FIU’s program demonstrated excellence in all areas. RNtoBSN.org's mission is to connect current and prospective nurses with the resources needed to pursue and obtain their BSN.

Lettie Pate Whitehead Foundation Commits $142,000 to FIU for Nursing Scholarships for Students in Accelerated BSN Programs
The Lettie Pate Whitehead Foundation recently committed $142,000 for nursing scholarships for accelerated students attending FIU undergraduate nursing programs within the Nicole Wertheim College of Nursing and Health Sciences (NWCNHS). The College has received more than $400,000 in scholarships from the Lettie Pate Whitehead Foundation within recent years. The group of students enrolling in the undergraduate programs have significant financial need for scholarship support in order to remain within the program and ensure their overall success. The scholarships provided through the Foundation will relieve some of the financial burdens of students within the undergraduate programs, as well as aide the NWCNHS in attaining its strategic goal of increasing student grant support by 25% in an effort to financially support students who aspire to change lives through caring at the bedside, leading in the classroom and the community and by discovering healthcare solutions through research.

Lettie Pate Whitehead Foundation Scholarships grants are made to accredited educational institutions in Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. More than 200 institutions participate annually in the Lettie Pate Whitehead scholarship program, 6 (including FIU) are located in Florida.
NWCNHS Faculty Appointment to the Florida Board of Nursing

Derrick Glymph, DNAP, CRNA, Clinical Assistant Professor of anesthesiology nursing in the (NWCNHS) was appointed by Governor Rick Scott to serve on the Florida Board of Nursing. The Florida Board of Nursing, composed of 13 members drawn from nurses in practice, education and administration as well as three consumer representatives, plays an integral role in health care regulation and provides oversight of the practice of nursing in the State of Florida. The Governor appointed three new members and reappointed three continuing members to the Board. Dr. Glymph’s term began February 9, 2015 and run through October 2017.

“It is a profound honor and privilege to serve the State of Florida and its citizens in this capacity,” said Dr. Glymph. With over 20 years of experience in nursing, Dr. Glymph started his career as a licensed practical nurse (LPN) and continued his education and experience becoming a critical care Registered Nurse (RN) and later an advanced practice Certified Registered Nurse Anesthetist (CRNA). Dr. Glymph received his Associate and Bachelor of Science degrees in Nursing from Norfolk State University (1995 and 1997), and his Master of Science and Doctor of Nurse Anesthesia Practice degrees from Virginia Commonwealth University (2004 and 2010). Dr. Glymph teaches in the classroom, simulation center and in clinical practice in the NWCNHS Department of Nurse Anesthetist Practice. Dr. Glymph also holds a clinical staff appointment at Mount Sinai Medical Center where he is engaged in anesthesia practice with Miami Beach Anesthesiology Associates. In addition, Dr. Glymph holds the rank of Lieutenant Colonel in the United States Army Reserves and serves as Chief Anesthetist-4224 United States Army Hospital, USAR. Glymph’s appointment is subject to confirmation by the Florida Senate.

NWCNHS Athletic Students Wins Regional Student Southeast Athletic Trainers’ Association (SEATA) Quiz Bowl Competition

The Athletic Training (AT) students competed in the regional Student SEATA conference Quiz Bowl on Friday, February 6th, 2015. The students competed in three rounds with each round consisting of 30 questions from six (6) categories. Categories derived from the 8 Content Areas identified in the Athletic Training in Educational Competencies 5th Edition, 6th Edition of the Board of Certification’s Role Delineation Study Guide and history questions about the profession and SEATA. NWCNHS AT students competed against 27 teams and won the competition by 7,000 points for the second year in a row. The students will be representing Florida International University in the Southeast Athletic Trainers' Association at the National Quiz Bowl Competition in St. Louis in June.
NWCNHS Athletic Students Garners NFL Internships in 2015

Five students from the Athletic Training Program at the NWCNHS have been awarded exciting internships with the National Football League (NFL) for 2015. Two second-year students have been awarded season-long internships upon completion of the Spring 2015 semester. **Billy Voltaire** will be heading to Colorado to work with the Denver Broncos. The Broncos, coming off a successful season, finished with a 12-5 record losing in the second round of the playoffs. **Elijah Bouldin** will be heading to Texas to work with the Houston Texans, which finished the season 9-7 and second in the American Football Conference South.

Three first year students have also been awarded internships to work with NFL teams during the summer. **Andre Washington** traveled in early May to Indiana for an extended internship with the Indianapolis Colts. The Colts finished a successful season with a 13-6 record, losing in the American Football Conference Championship game. **Kyle Fisher** will be joining the Cleveland Browns in Ohio. The Browns are a storied franchise and Kyle had this to say about his opportunity, “I’m most excited to learn from an FIU alumnus in an elite setting and to be surrounded by a professional sports medicine team as well as the athletes.” Finally, **Michael Hervis** will be traveling to Washington where he will be joining the Seattle Seahawks, this year’s Super Bowl runner up. Although the team could not defend its championship title from the year before, its epic battle with the New England Patriots made for one of the most exciting games in Super Bowl history.
The Robert Stempel College of Public Health and Social Work has several active cross-disciplinary research groups focusing on public health and social welfare. The following narrative expands on the earlier reports.

**Integrated Biostatistics and Data Management Center (IBDMC)**

O. Dale Williams, *Director*

The Integrated Biostatistics Center and Data Management Center was developed in 2012 with the arrival of O. Dale Williams as the chair of the Department of Biostatistics. IBDMC provides support to investigators preparing proposals, study designs, data collection and management plans, statistical analyses, and manuscripts. To date, the IBDMC has worked with more than 171 requestors, including 86 FIU faculty, 20 staff members, 33 Ph.D. students, 23 master’s students. The IBDMC has also worked with nine organizations FIU; 50 departments, including outside entities; 12 FIU colleges and programs and other outside entities for a total of 274 individual projects. The IBDMC also participates in research with Baptist Health South Florida, Camillus House, Miami Children’s Hospital, Florida Department of Health in Monroe County, and other CBO’s in South Florida.

**Center for Research on U.S. Latino HIV/AIDS and Drug Abuse**

Mario De La Rosa, *Director*

The primary mission of the Center for Research on U.S. Latino HIV/AIDS and Drug Abuse (CRUSADA) is to advance collective knowledge and understanding of the social and behavioral factors influencing the spread of HIV and substance abuse in Latino populations. CRUSADA doctoral and postdoctoral research training and mentoring programs include faculty and students from the RSCPHSW, the College of Education, and the HWCOM. The Center also has ongoing collaborations with faculty from the University of Miami Miller Schools of Medicine and Nursing and Health Studies, and the Morehouse School of Medicine. Over the last three months, CRUSADA investigators have submitted an application to National Institute of Health (NIH) to continue following the recent immigrant study cohort. Investigators are working on an R34 application to the National Center for Complementary and Alternative Medicine to investigate the role of Santeria in helping HIV-positive Latino immigrants cope with their illness. Investigators have also published three papers and have an additional seven in press. One of the doctoral students working with CRUSADA received funding to conduct her dissertation research through an NIH pre-doctoral F31 fellowship award.
FIU-BRIDGE Group
Eric Wagner, Director

FIU-BRIDGE recently received three new extramural grants in support of their research. The first project, entitled “Miami-Dade Partnership for Preventing Health Risks among Young Adults,” is a 3-year, $900,000 federal (SAMHSA) grant. The goal of the project is to prevent substance abuse, HIV/AIDS, and hepatitis C among Hispanic young adults at FIU and in Miami-Dade. Partners in this project include Dieste, Inc., the largest Hispanic advertising firm in the U.S., Mixto Music, a Miami-based Hispanic market media producer, Union Positiva, a Miami-based CBO specializing in HIV testing among Hispanics, and Banyan Health Care Systems. The second project, entitled “Yoga as a complement to standard care for adolescents with eating & substance use disorders,” is a 2-year, $120,000 grant from the Ware Foundation. The goal of the project is to evaluate yoga as an ancillary intervention for teenagers experiencing problems with eating disorders or substance use. This project includes Miami Children’s Hospital and StandOUT Yoga as partners. The third project, “Enhancing resilience among at-risk minority youth through music education (Little Haiti),” is a one-year, $45,000 Ware Foundation grant. The goal of the project is to evaluate the impact of Miami Music Project’s ensemble-based music instruction on promoting academic and personal success among minority elementary school students from Miami’s Little Haiti neighborhood. In addition, FIU-BRIDGE continues to conduct several other research projects funded by NIH and the Ware Foundation.

FIU-Collaborative for Health Economics and Strategic Solutions
Benjamin Amick, Director

The mission of FIU-Collaborative for Health Economics and Strategic Solutions (FIU-CHESS) is to assist government, business, and community-based organizations to reach critical health policy and economic strategy goals. Faculty associated with FIU-CHESS conduct health services research, provide data resources for government and business, develop program and strategic designs, and provide applied training for post-doctoral and graduate students. Faculty in FIU-CHESS are from the Academic Health Center’s three collages, and the Colleges of Business, Arts and Sciences, and Engineering and Computing. FIU-CHESS is also involving leaders in the South Florida business community. In the past quarter, FIU-CHESS was awarded two contracts from FIU-Health: 1) A $50,000 contract to estimate the economic burden for households with adults with asthma in support of EMBRACE; and a $25,000 contract to evaluate and propose a new organizational structure for FIU Student Health Services. FIU-Health is currently in negotiation with Caregiver Services Inc. (CSI) for a contract to create a new managed care organization to treat complex pediatric patients in Florida. A final contract is in negotiation. FIU-Health is partnering with Florida Impact and multiple Miami-Dade community service groups to create a new program to provide food to under-served youth. FIU-CHESS will evaluate relevant health outcomes for this project. The contract will begin in June. A contract with Health Choices Network to evaluate the economics and health outcomes of a GE funded diabetes treatment project was renewed.
Cardiovascular Research Group
Wasim Maziak, Director
One of the most exciting collaborative developments in RSCPHSW is the Cardiovascular Research Group. The Cardiovascular research group has participating faculty from the Department of Epidemiology and Baptist Health South Florida. This collaboration has resulted in more than 40 peer reviewed publications in top-tier journals. The work of those in the Cardiovascular Research Group is laying the ground work for the Miami Health Study that will provide new insights into risk factors for cardiovascular disease in South Florida’s diverse population. In collaboration with Baptist Health, the Department of Epidemiology conducted two workshops on “How to conduct Meta-Analysis” in March of 2015. The workshops were conducted by Dr. Emir Veledar, Baptist Health, and Dr. Purnima Madhivanan, Department of Epidemiology. The workshops were designed to provide students and researchers with hands-on experience on how to plan, conduct and communicate results of a meta-analysis. As part of ongoing collaboration with Baptist Health in cardiovascular research, the Department of Epidemiology will host three Baptist Fellows. The fellows will work with investigators in the Research Group on research projects related to cardiovascular health in Miami and South Florida.

Virtual Center for Community Health
Pedro Greer and O. Dale Williams, Directors
The virtual center is a cooperative effort between faculty in the RSCPHSW, the HWCOM, and the College of Law. The Virtual Center promotes community health through innovative research, training, and service. It provides a setting for communication and collaboration across the AHC colleges and programs, and brings interdisciplinary expertise and resources together to address the health and healthcare needs in South Florida. The goal of the Virtual Center in the coming year is to build its data collection and management capacity.
A senior leadership task force has been engaged for over 8 months to plan the integration of SHS and FIU Health. The task force included health economists from the Robert Stempel College of Public Health & Social Work (RSCPHSW) to design an actuarially sound model of care for our student population. Student feedback was obtained through surveys and direct participation by student leaders. The model was redesigned to preserve programs that are not part of traditional healthcare but are essential to student success. FIU student health fees are amongst the lowest in Florida; the goal of the redesigned model is to maximize the impact of this investment for as many students as possible.

In FY 15-16, student health fees will be divided between FIU Health and the Office of Student Affairs (OSA). Dollars in OSA will support the Victim Empowerment Program, Behavioral Health, and Student Learning. Dollars managed by FIU Health will support a redesigned healthcare model focused on student development, retention, and academic success. The clinical healthcare dollars from student fees come out to approximately $100/student/year. Our new model maximizes population impact by providing services across four Pillars. The services are aligned with national objectives as outlined by the American College Health Association (AHCA) and Healthy Campus 2020.

- Pillar 1: Direct provision of care for episodic illness that impacts students’ performance
  - Provided at SHS Modesto A. Maidique Campus (MMC) and Biscayne Bay Campus (BCC)
- Pillar 2: Connection to FIU Health and community resources for specialty, chronic, and acute care
  - Provided through Health Navigators
- Pillar 3: Education of the student body on the current health care landscape
  - Provided through Health Navigators and others
- Pillar 4: Evidence-based health promotion for the FIU student population as recommended by AHCA
  - Alcohol and tobacco use screening and counseling
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Health Affairs Committee
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Page 2

- Depression screening
- Infectious disease/provision of immunizations

Student health fees are a safety net that allows uninsured students to address episodic illnesses that can impede academic performance. Students identified to have significant chronic illness will be aided by navigators to seek insurance coverage (through FIU or the State Exchanges) and/or connect to Federally Qualified Community Health Centers. Almost 90% of our students are between the ages of 20 and 30. There are no nationally endorsed primary care guidelines for these young adults. Evidence-based preventive interventions such as screening for sexually transmitted infection, are included in Pillar one.

A novel resource, patient navigators, will be utilized in Pillars two and three to promote access to providers and health insurance literacy. The integrated model is contemporary and seeks, in Pillar three, to move the needle on students’ knowledge of health insurance options in light of the Affordable Care Act.

The task force is now working to operationalize this by July 2015 and the current clinical SHS structure will support the Four Pillar Model. A robust communication campaign will be conducted to promote student understanding and an evaluation plan is underway to measure impact on the student population.
SUBJECT: Holistic Admissions for Medical School Candidates: Assessing IQ, EQ, and CQ

PROPOSED COMMITTEE ACTION

For Information

AUTHORITY FOR BOARD OF GOVERNORS ACTION

Article IX, Section 7, Florida Constitution

BACKGROUND INFORMATION

The skills and competencies required of the next generation of health care workers were central topics of the Health Initiatives Committee meeting on September 17, 2014 and the Committee workshop on July 21, 2014. Changes in health care delivery are leading to shifts in health-related educational programs and a re-evaluation of who to train and how to best train them for practice.

As part of its environmental scan, the Committee will hear a presentation from representatives of the Max Planck Institute for Medical Research on health care competencies and the qualities of health care professionals linked to desired health outcomes. The Max Planck Society operates a number of research institutions in Germany and around the world, including the Max Planck Florida Institute for Neuroscience in Jupiter, Florida. The Max Planck Institutes are independent and autonomous in the selection and conduct of their research pursuits, but collectively they carry out basic research in the life sciences, natural sciences and the social and human sciences.

Supporting Documentation Included: None

Facilitators/Presenters: Dr. Jan K. Woike, Max Planck Institute for Human Development; Dr. Udo Fischer, CEO, Duolark LLC
Trustworthy Doctors, Communication Tools, and Healthy Routines

Jan K. Woike, Dr. phil., Research Scientist
Udo Fischer, PhD, CEO of Duolark
Doctors as seen by a cancer patient

“The first doctor gave her six months to live. The second and third said chemotherapy would buy more time, but surgery would not. A fourth offered to operate.”

“It’s patchwork, and frustrating that there’s not one person taking care of me who I can look to as my champion”
Doctors as seen by a cancer patient

“The first doctor gave her six months to live. The second and third said chemotherapy would buy more time, but surgery would not. A fourth offered to operate.”

“It’s patchwork, and frustrating that there’s not one person taking care of me who I can look to as my champion”

Patient-Centered Care and Shared Decision Making


Non-Shared Medical Decision Making I
Non-Shared Medical Decision Making II
Non-Shared Medical Decision Making III
Shared Medical Decision Making

- Decision
- Communication
- Doctor
- Patient
- Medical Knowledge
- Condition, Preferences, Desires/Emotions, Perceptions
Shared Medical Decision Making in theory

- Decision
  - Communication
    - Doctor
    - Patient

Evidence-based
- Medical Knowledge

Informed

Individually tailored
- Condition
  - Preferences
  - Desires/Emotions
  - Perceptions
Only 1 in 4 physicians introduced herself,
3 in 4 patients cannot identify their doctor.
2 out of 3 patients are discharged from the hospital without even knowing their diagnosis.
On average, physicians wait 18 seconds before interrupting patients’ narratives of their symptoms

How to achieve Shared Medical Decision Making in practice?

1. Communication
   - Doctor
   - Patient

2. Decision
   - Condition
   - Preferences
   - Desires/Emotions
   - Perceptions

3. Medical Knowledge
Selection Criteria
Physiology Question - MCAT

The liver synthesizes factors that act cooperatively with platelets to facilitate which physiological process?

- A. Cholesterol synthesis
- B. Glucose metabolism
- C. Blood clotting
- D. Fat digestion

[Answer: C. Blood clotting]
Doctor-patient communication

Doctor-patient communication requires

- Medical knowledge
- Communication skills
Communication Skills

- Communication techniques
- Ability and motivation to listen
- (Applied) psychological knowledge
- Nonverbal communication

A researcher is interested in memory of novel words. He shows participants unrelated words on a card, one after the other. Participants see 20 words in total, wait for 2 minutes, and then are asked to write down all of the words they can remember.

The researcher finds that 95% of the subjects remember the first three words. This finding is an example of:

- A. recency effect
- B. proactive interference
- C. the primacy effect
- D. retroactive interference

Emotional Intelligence (EI, EQ,...) as a better selection criterion?

“the ability to monitor one’s own and others’ emotions, to discriminate among them, and to use this information to guide one’s thinking and actions.”

(Salovey and Mayer, 1990)

Later additions and alternative concepts:

- Ability to perceive emotion, integrate understand and to regulate emotion (Mayer and Salovey, 1997)
- Non-cognitive skills, abilities, competencies, capabilities for coping with environmental pressure (Bar-on, 1997)
- Perceive and express emotions, regulate emotions in self and others (Kasman, Fryer-Edwards, & Braddock, 2003)

Problems with Emotional Intelligence

- Unclear whether EI is a general individual ability that can be measured
  - EI could be a set of techniques
  - EI could depend on current contexts and relations
- There are numerous conflicting measurement tools with sometimes poor psychometric properties
- Current concept lacks a moral dimension: manipulation of others is consistent with high EI
- Skill-based measures (ability EI) are very similar to general intelligence, self-reports (trait EI) are easily fakeable and correlate with personality measures

Conclusions about EI

- “There is insufficient evidence, at present, to support the use of EI as selection criterion.”
- “…there would be a real risk of including and excluding the wrong people. It is rather illogical, moreover, to exclude people because they lack a property they are supposed to acquire from the curriculum they are being selected for.”

Consequence:
The development of a new measurement tool is desirable targeting the specific student population and the practical demands of their vocations.

Second/third year medical students

- Studies find an “escalation of cynicism”, an “ethical erosion”, and a decline in idealism that occurs during medical studies
- Student’s comment: “[the] humanistic side of medicine is too soft and a waste of time.”

“Profound changes to enhance empathy during medical education should be considered by leaders in medical education as a mandate, not an option, if the public is to be served in the best possible manner.”

Training and teaching goals

Selection

Training
How to achieve Shared Medical Decision Making in practice: Statistical Literacy

Doctor

Communication

Patient

Condition
Preferences
Desires/Emotions
Perceptions

Medical Knowledge

Decision

Patient Condition Preferences Desires/Emotions Perceptions

Doctor Medical Knowledge
**Question asked to 160 gynecologists**

Assume you conduct breast cancer screening using mammography in a certain region. You know the following information about the women in this region:

- The probability that a woman has breast cancer is 1% (prevalence)
- If a woman has breast cancer, the probability that she tests positive is 90% (sensitivity)
- If a woman does not have breast cancer, the probability that she nevertheless tests positive is 9% (false-positive rate)

A woman tests positive. She wants to know from you whether that means that she has breast cancer for sure, or what the chances are. What is the best answer?

- 1%, 10%, 81%, or 90%?
Probability of cancer given a positive test

**Conditional Probabilities**

\[ p(\text{breast cancer}) = 1\% \]
\[ p(\text{positive}|\text{cancer}) = 90\% \]
\[ p(\text{positive}|\text{no cancer}) = 9\% \]

Gynecologists could calculate the correct answer from the information given (or recall it from their training)

\[ p(\text{cancer}|\text{positive}) = \frac{.01 \times .90}{.01 \times .90 + .99 \times .09} \]

1\%, 10\%, 81\%, or 90%?

**Mammography**
160 Gynecologists estimate:
Probability of breast cancer | positive mammogram

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Probability of breast cancer | positive mammogram

160 Gynecologists estimate:
Probability of breast cancer | positive mammogram

160 Gynecologists estimate:
Probability of breast cancer | positive mammogram

Probability of cancer given a positive test

**Conditional Probabilities**

- \( p(\text{breast cancer}) = 1\% \)
- \( p(\text{positive}|\text{cancer}) = 90\% \)
- \( p(\text{positive}|\text{no cancer}) = 9\% \)

**Natural Frequencies**

- 1000 women
- 10 cancer
  - 9 positive
  - 1 negative
- 990 no cancer
  - 89 positive
  - 901 negative

\[
p(\text{cancer}|\text{positive}) = \frac{.01 \times .90}{.01 \times .90 + .99 \times .09}
\]

**Mammography**

Probability of cancer given a positive test

Conditional Probabilities

- $p(\text{breast cancer}) = 1\%$
- $p(\text{positive|cancer}) = 90\%$
- $p(\text{positive|no cancer}) = 9\%$

Natural Frequencies

- 1000 women
  - 10 cancer: 9 positive, 1 negative
  - 990 no cancer: 89 positive, 901 negative

Mammography

- $p(\text{cancer|positive}) = \frac{.01 \times .90}{.01 \times .90 + .99 \times .09} = \frac{9}{9 + 89} \approx 10\%$

160 Gynecologists estimate:
Probability of breast cancer | positive mammogram

160 Gynecologists estimate:
Probability of breast cancer | positive mammogram

Physicians and statistics

- Physicians **overestimate the accuracy** of test results
  

- We can **manipulate** physicians’ beliefs about a medical procedure **by changing the representation** of evidence
  

- Physicians **do not communicate** relevant clinical evidence in a complete and understandable way
  

**Tools can help to overcome these problems**
Prostate Cancer Early Detection

by PSA screening and digital-rectal examination. Numbers are for men aged 50 years or older, not participating vs. participating in screening for 13 years.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>1,000 men without screening</th>
<th>1,000 men with screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many men died from prostate cancer?</td>
<td>5*</td>
<td>4</td>
</tr>
<tr>
<td>How many men died from any cause?</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

Harms

<table>
<thead>
<tr>
<th>Harms</th>
<th>1,000 men without screening</th>
<th>1,000 men with screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many men were diagnosed and treated** for prostate cancer unnecessarily?</td>
<td>–</td>
<td>30</td>
</tr>
<tr>
<td>How many men without cancer got a false alarm and a biopsy?</td>
<td>–</td>
<td>170</td>
</tr>
</tbody>
</table>

* This means that about 5 out of 1,000 men (50+ years of age) without screening died from prostate cancer within 13 years.

** With prostate removal or radiation therapy, which can lead to incontinence or impotence.

Prostate Cancer Early Detection
by PSA screening and digital-rectal examination.
Numbers are for men aged 50 years or older, not participating vs. participating in screening for 10 years.

1,000 men without screening:

- Men dying from prostate cancer: 5
- Men dying from any cause: 200
- Men that were diagnosed and treated for prostate cancer unnecessarily: -
- Men without cancer that got a false alarm and a biopsy: -

1,000 men with screening:

- Men dying from prostate cancer: 4
- Men dying from any cause: 200
- Men that were diagnosed and treated for prostate cancer unnecessarily: 30
- Men without cancer that got a false alarm and a biopsy: 170

---


I never dreamed that my discovery four decades ago would lead to such a profit-driven public health disaster. The medical community must confront reality and stop the inappropriate use of P.S.A. screening. Doing so would save billions of dollars and rescue millions of men from unnecessary, debilitating treatments.

Richard J. Ablin
(Professor of immunobiology and pathology, University of Arizona)
Dealing with expectations

Doctor

Patient

Medical Knowledge

Condition Preferences Desires/Emotions Perceptions

Communication

Decision
Would you prefer a total-body CT scan or receiving $1000 in cash?

Telephone survey (n=500)

Would you prefer a total-body CT scan or receiving $1000 in cash?

27% $1000

73% Full-body CT scan

Overuse of CT scans

“Evidence is beginning to emerge that overutilization of radiological scans permits an oncologist to “cure” a current cancer only to cause a future one.”

“Evidence is beginning to emerge that overutilization of radiological scans permits an oncologist to “cure” a current cancer only to cause a future one.”

Two reasons for overdiagnosis (and overtreatment)
1) Conflicting interests

“[… ] we at Emory have figured out that if we screen 1,000 men at the North Lake Mall this coming Saturday, we could bill Medicare and insurance companies for $4.9 million in health care costs [for biopsies, tests, prostatectomies, etc]. But the real money comes later […]. we don’t screen any more at Emory, once I became head of Cancer Control.”

Dr. Otis Brawley (interview)
(at the time Director of the Georgia Cancer Center)
2) Fear of litigation

“Anyone who has been in practice for a while knows that the **reason** we take these x-rays is **legal, not medical**. […]”

A $50,000 fluoroscan machine can give a reading in a twinkling. It costs $30,000 to process any single claim, whether anything comes of it or not […].”

---


2) Fear of litigation

“Anyone who has been in practice for a while knows that the reason we take these x-rays is legal, not medical. […] 

A $50,000 fluoroscan machine can give a reading in a twinkling. It costs $30,000 to process any single claim, whether anything comes of it or not […]“


2) Fear of litigation

“Anyone who has been in practice for a while knows that the reason we take these x-rays is legal, not medical. […] A $50,000 fluoroscan machine can give a reading in a twinkling. It costs $30,000 to process any single claim, whether anything comes of it or not […] .”


Effects of communication training

“Over the next two years, patient satisfaction with doctors […] moved the hospital’s predicted score up in national rankings by a remarkable 40 percentile points. Several studies have found a correlation between higher patient satisfaction scores and better health outcomes.”
Integration of Communication training

- Decision making skills, communication skills, and specialized medical training need to be applied at the same time
- Communication (and decision making) should not be taught as a single and isolated class
- Practical exercises are essential: simulation, interaction, perspective-taking
Evaluation criteria

Selection  Training  Evaluation
Objective Structured Clinical Examination

- (Simulated) patients played by actors with fixed response script accompanied by medical histories etc.
- Allows to test a variety of skills and assess behavior in a variety of roles
- Can be adapted to different learning levels
- Allows to assess communication skills

Predictive capability of the OSCE

- Communication Score in OSCE exam has been found to predict the number of patient complaints to regulatory authorities
- OSCE predictor as strong as the classic written exam score (and improves prediction beyond it)
- Particularly suited to predict complaints based on perceived deficits in doctor-patient communication

Development of OSCEs

- Examination should also include an assessment of:
  - the management of uncertainty, dealing with ambiguity, the unspectacular

Development of OSCEs

- Examination should also include an assessment of:
  - the management of uncertainty, dealing with ambiguity, the unspectacular
  - dealing with various communication and teamwork situations

Healthy routines: Surgical Safety Checklist

Sign in
Before induction of anesthesia, members of the team (at least the nurse and an anesthesia professional) orally confirm that:

- The patient has verified his or her identity, the surgical site and procedure, and consent
- The surgical site is marked or site marking is not applicable
- The pulse oximeter is on the patient and functioning
- All members of the team are aware of whether the patient has a known allergy
- The patient’s airway and risk of aspiration have been evaluated and appropriate equipment and assistance are available
- If there is a risk of blood loss of at least 500 ml (or 7 ml/kg of body weight, in children), appropriate access and fluids are available

Time out
Before skin incision, the entire team (nurses, surgeons, anesthesia professionals, and any others participating in the care of the patient) orally:

- Confirms that all team members have been introduced by name and role
- Confirms the patient’s identity, surgical site, and procedure
  …

Surgical Safety Checklist: Effect

Rate of Death
(first 30 days after operation)

Before Checklist
(n=3733)

With Checklist
(n=3955)

1.50%

0.80%

Surgical Safety Checklist: Effect

Checklists may save lifes

Yet:

Not every hospital uses them.

Surgical Safety Checklist: Effect

Checklists may save lives

Yet:

Not every hospital uses them.

“The most common barrier was resistance from senior clinicians.”

“… active resistance or passive noncompliance from individuals in the OR team, most frequently (84% of the time) from senior surgeons and/or anesthesiologists. This often made it very challenging for the person leading the checks (often a nurse) to complete them in the intended manner, or without feeling personally attacked.”

3000 wrong-side operations per year

“This is a horrendous tragedy when a healthy kidney has been removed, leaving the diseased one in the patient.”

“The solution […] requires significant training, changes to entrenched behaviors, and consensus building that does not come easily to territorial departments.”

“70–80% of healthcare errors are caused by human factors associated with poor team communication and understanding.”


Development of OSCEs

- Examination should also include an assessment of:
  - the management of uncertainty, dealing with ambiguity
  - dealing with various communication and teamwork situations
  - 360° assessment, inter-professional training

Development of OSCEs

- Examination should also include an assessment of:
  - the management of uncertainty, dealing with ambiguity, the unspectacular
  - dealing with various communication and teamwork problems
- 360° assessment, inter-professional training
- Ongoing formative assessment preferable to one-shot summative evaluation

Influencing practice

Selection  Training  Evaluation  Practice
How much do doctors improve across their careers?

59 studies with a total of over 50,000 doctors were analyzed.

The Relationship between Clinical Experience and Quality of Health Care (59 articles)

- The majority of studies found worse performance of longer-practising doctors
- Few studies (~4%) found improvement

“In summary, our results suggest that physicians with more experience may paradoxically be at risk for providing lower-quality care.”

The Relationship between Clinical Experience and Quality of Health Care (59 articles)

Possible Explanations:

- Medical education may have improved
- Older physicians may not adopt newly proven therapies, tools and techniques

The Relationship between Clinical Experience and Quality of Health Care (59 articles)

Possible Explanations:

- Medical education may have improved
- Older physicians may not adopt newly proven therapies, tools and techniques

Recommendation:

- Life-long learning is a necessity
- The skills for life-long learning have to be acquired during training
- Life-long learning should be supported through tools and tailored information

Alumni Network

- Communicate new findings
- Share newly developed communication tools (as a service)
- Receive feedback from practitioners to guide future development of the educational process
- Start a two-way communication
Learning from Outcomes
Changing (Self-)Selection

Selection  Training  Evaluation  Practice
Compatibility with current goals

“Candidates and students must possess the emotional health required for […] the development of mature, sensitive and effective relationships with patients.”

USF

“Grades and test scores are important, but so are other factors. […] In our admissions process, we look into their background and explore the details of where they grew up, to what extent they have served the underserved, what is motivating them to attend medical school and much more. […] Florida State medical students learn in an environment that values diversity, mutual respect, teamwork and open communication.”

FSU
Recommendations

Selection → Training → Evaluation → Practice → Selection
Thank you very much.

Additional thanks to:
- Wolfgang Gaissmaier (University of Konstanz),
- Gerd Gigerenzer (MPIB Berlin),
- Ulrich Hoffrage (University of Lausanne),
- Ralph Hertwig (MPIB Berlin),
- Mirjam Jenny (MPIB Berlin),
- Niklas Keller (MPIB Berlin),
- Patricia Kanngiesser (MPIEVA Leipzig)
STATE UNIVERSITY SYSTEM OF FLORIDA  
BOARD OF GOVERNORS  
Health Initiatives Committee and Advisory Group Workshop  
January 21, 2015  

SUBJECT: Gap Analysis for Designated Health Occupations

PROPOSED COMMITTEE ACTION

For information

AUTHORITY FOR BOARD OF GOVERNORS ACTION

Article IX, Section 7, Florida Constitution

BACKGROUND INFORMATION

In August 2013 the Board of Governors Health Initiatives Committee was established to provide leadership for the development of system-level policy regarding health initiatives. The Committee is charged with being responsible for all issues associated with health-related education in the State University System. During the first year of its Two-Year Work Plan, the Committee is conducting an environmental scan encompassing three areas: health-related education, health care delivery impacted by the health care academic experience, and health-related research. The work of the Committee will result in a strategic plan that will guide the State University System in both the foreseeable future as well as in the long-term when Florida is expected to experience even more stress on its health care delivery system.

As part of its environmental scan, the Committee and the Committee’s Advisory Group will hear a presentation from staff with respect to workforce gaps for designated health occupations. The gap analysis for health programs and occupations followed the methods previously established in 2012-2013 by the Board of Governor’s Access and Educational Attainment Commission. Similar to the Commission’s process, the Health Initiatives Committee and Advisory Group will discuss the initial gap analysis results and advise on the inclusion of additional, contextual factors that may impact supply and demand for health professionals.

Supporting Documentation Included: None

Facilitators/Presenters: Ms. Amy Beaven
Gap Analysis for Health Occupations: Methods and Initial Figures

Amy Beaven, Director for STEM and Health Initiatives
January 21, 2015

www.flbog.edu
Gap Analysis: Workshop Agenda

Part 1.
Background and Purpose

Part 2.
Which Health Occupations are Undersupplied?
  • Gap Analysis Methodology
  • Initial Figures

Part 3.
Which Health Occupations are Emerging or Evolving?
  • Identifying Demand Shifts
  • Three Professional Practice Doctorates
The Health Initiatives Committee year-long three-pronged Environmental Scan:

1. Health Care Delivery

2. Health-related Research

3. Health Programs and Workforce Demand
Part 2. Which Occupations are Undersupplied?

The Initial Steps
Follows gap analysis methods established by the Commission on Higher Education Access and Attainment

Additional Steps are Still Necessary
Introduction to the Commission’s Gap Analysis

Supply vs. Demand → Gap Analysis + Contextual Metrics
Gap Analysis Methodology: Supply

- **SOURCE:** Supply is based on 2012-13 degrees awarded data as reported by 402 Florida institutions to the National Center for Education Statistics.
- **PRIOR LIMITATION:** The Commission’s methodology includes all graduates, including those who left Florida. Since the Commission’s work, additional data has become available to estimate out-migration.
- **LIMITATION:** The methodology currently does not include any consideration of occupational in-migration, occupational retention, and attrition.
The Classification of Instructional Programs (CIP) taxonomy is organized on three levels: 1) the two-digit series, 2) the four-digit series, and 3) the six-digit series. Postsecondary educational institutions use six-digit CIP codes when completing the Integrated Postsecondary Education Data System (IPEDS) Completions Survey.

EXAMPLE:
51-0000 Health Professions and Related Programs
   51-1200 Medicine
       51-1201 Medicine (Medical School)
   51-1400 Medical Clinical Sciences/Graduate Medical Studies
       51-1401 Medical Scientist
**Gap Analysis Methodology: Demand**

**Supply vs. Demand** → **Gap Analysis** + **Contextual Metrics**

**SOURCE:** Demand is based on the long-term (2014-2022) occupational employment projections of annual job openings (growth and replacements) by the Florida Department of Economic Opportunity (DEO) Labor Market Statistics Center.

**KEY DECISION:** Previously, the Commission on Access and Attainment agreed that the educational attainment levels for the occupational data would be based on the Bureau of Labor Statistics (BLS) national taxonomy of educational levels.
Standard Occupational Classification and Coding Structure

To suit the needs of various data users, the occupations in the SOC are classified at four levels of aggregation: major group, minor group, broad occupation, and detailed occupation. Each lower level of detail identifies a more specific group of occupations.

EXAMPLE:
29-0000 Healthcare Practitioners and Technical Occupations
   29-1000 Health Diagnosing and Treating Practitioners
      29-1060 Physicians and Surgeons
         29-1062 Family and General Practitioners
Demand: Annual Average Occupational Openings by Specific Health-Related Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual Openings</th>
<th>Average Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacists</td>
<td>844</td>
<td>$114,650</td>
</tr>
<tr>
<td>Physicians and Surgeons, All Other</td>
<td>741</td>
<td>$208,894</td>
</tr>
<tr>
<td>Family and General Practitioners</td>
<td>584</td>
<td>$189,800</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>527</td>
<td>$84,490</td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>501</td>
<td>$108,430</td>
</tr>
<tr>
<td>Health Specialties Teachers, Postsecondary</td>
<td>449</td>
<td>$137,467</td>
</tr>
<tr>
<td>Dentists, General</td>
<td>411</td>
<td>$156,083</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>357</td>
<td>$92,747</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>320</td>
<td>$82,326</td>
</tr>
<tr>
<td>Speech and Language Pathologists</td>
<td>306</td>
<td>$75,275</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technologists</td>
<td>303</td>
<td>$57,762</td>
</tr>
<tr>
<td>Medical and Public Health Social Workers</td>
<td>302</td>
<td>$47,174</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>250</td>
<td>$98,467</td>
</tr>
<tr>
<td>Mental Health Counselors</td>
<td>245</td>
<td>$41,933</td>
</tr>
</tbody>
</table>

Source: Data from the Dept. of Economic Opportunity, Labor Market Statistics Ctr., Employment Projections Program, Forecast to 2022, released Sept.2014. NOTE: Data graphed and rounded by FL Board of Governors.
Gap Analysis: Relating Demand and Supply

**Demands**
- Employers in Florida
  - Surveyed by FDEO to determine projected hiring using USDOL Standard Occupational Classification codes

**Supply**
- USDOL & National Crosswalk Center
  - SOC codes have been cross-walked to related educational CIP codes by the National Crosswalk Center
- US Dept. of Education (NCES/IPEDS)
  - Classification of Instructional Programs (CIP) codes assigned to educational programs using a taxonomy established by the U.S. Department of Education
- Educational Institutions (SUS, FCS, ICUF, CIE)
  - Colleges and universities offer degrees identified by CIP codes which can be reasonably aligned with SOC codes

**Gap Analysis**

**Contextual Metrics**
## Gap Analysis: A Sample of Initial Figures

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual Demand</th>
<th>Adjusted Supply</th>
<th>Initial Difference</th>
<th>Needs Additional Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>1,934</td>
<td>975</td>
<td>-959</td>
<td>✓</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>527</td>
<td>340</td>
<td>-187</td>
<td>✓</td>
</tr>
<tr>
<td>Dentists</td>
<td>511</td>
<td>205</td>
<td>-306</td>
<td>✓</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>320</td>
<td>215</td>
<td>-105</td>
<td>✓</td>
</tr>
<tr>
<td>Medical Technologists</td>
<td>303</td>
<td>74</td>
<td>-229</td>
<td></td>
</tr>
<tr>
<td>Medical and Public Health Social Workers</td>
<td>302</td>
<td>184</td>
<td>-118</td>
<td></td>
</tr>
<tr>
<td>Veterinarians</td>
<td>162</td>
<td>94</td>
<td>-68</td>
<td></td>
</tr>
</tbody>
</table>
Gap Analysis Methodology: Contextual Metrics

- Average Wage ✓
- Projected 2014-2022 Annual Growth Rates ✓
- Completions from Florida Residency and Internship Programs (When Required for Licensing or Credentialing)
- Number of Graduates from Post-Professional Programs
- Estimates of Supply from New and Planned Programs
- Estimates of In- and Out-Migration
- Practice Patterns from Licensing Data and Surveys
- Additional Models of Healthcare Demand
Today’s Discussion of Specific Health Occupations

Discuss Handout on 18 Occupation Groups

Generally Discuss Demand and Supply Issues for Nursing
Discussion Questions for Part 2. Which Health Occupations are Undersupplied?

1. Are the methods and data we’ve considered up to this point appropriate for answering our environmental scan question?

2. What are the priority contextual factors to consider next?

3. Once we answer the undersupply question, should we gather data on the cost and quality of programs that may need to grow? Is that part of an implementation plan to come later?
Emerging Occupations: newly forming occupations in which new skills and competencies in the workforce are becoming formally recognized

Potentially Occupational Health and Safety Specialists, Epidemiologists, Audiologists, and Genetic Counselors

Evolving Occupations: occupations that currently exist but are being redefined by changes in necessary skills and competencies

Potentially Dietitians and Nutritionists, Occupational Therapists, Nurse Practitioners, and Physician Assistants
The Issue
Need to determine demand for programs where the degree proposed is higher than the typical education level for a given occupation

Proposals for March 2015
Doctorate in Clinical Nutrition at UNF
Doctor of Social Work (Clinical/Medical Specialty) at FAU
Doctor of Nursing Practice at FGCU
Discussion Questions for Part 3. Which Occupations are Emerging or Evolving?

1. Can we identify evolving or emerging health occupations from those considered in the gap analysis? Have we left out any emerging occupations?

2. For the professional practice doctorates, is there evidence that graduates of these programs will benefit from a hiring preference, promotion potential, or higher earnings?

3. Are changes in the practice environment driving the transition to a higher credential? What are other drivers of credential change?

4. Are the proposed programs likely to enroll students and be sustainable? If the market demand remains small, will the market become saturated quickly even in the presence of high student demand?
Dietitians and Nutritionists

See Handout
See Handout
The MSN to DNP Transition

Number of Graduates by Program for Academic Year 2012-2013 as Reported on the Florida Center for Nursing Annual Survey

<table>
<thead>
<tr>
<th>School Name</th>
<th>MSN – Nurse Practitioner</th>
<th>MSN – Nurse Educator</th>
<th>MSN – Nurse Leadership</th>
<th>MSN – Clinical Nurse Specialist</th>
<th>MSN – Certified Registered Nurse Anesthetist</th>
<th>MSN – Nurse Midwife</th>
<th>Doctoral - PhD</th>
<th>Doctoral - DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGCU</td>
<td>9</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>14</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>UWF</td>
<td>--</td>
<td>1</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>USF</td>
<td>140</td>
<td>36</td>
<td>--</td>
<td>--</td>
<td>16</td>
<td>--</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>FAU</td>
<td>89</td>
<td>22</td>
<td>23</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4</td>
<td>14</td>
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<tr>
<td>UCF</td>
<td>7</td>
<td>26</td>
<td>37</td>
<td>1</td>
<td>--</td>
<td>--</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>UF</td>
<td>59</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>8</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>FIU</td>
<td>141</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>38</td>
<td>--</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>FSU</td>
<td>--</td>
<td>4</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>15</td>
</tr>
<tr>
<td>UNF</td>
<td>21</td>
<td>--</td>
<td>--</td>
<td>2</td>
<td>27</td>
<td>--</td>
<td>--</td>
<td>5</td>
</tr>
<tr>
<td>FAMU</td>
<td>11</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>TOTAL</td>
<td>477</td>
<td>89</td>
<td>60</td>
<td>3</td>
<td>95</td>
<td>8</td>
<td>30</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: Florida Center for Nursing, Nurse Education Program Survey Results, Academic Year 2012-2013
## Supply: Top Degrees Awarded in Florida (in 2012-2013)

By Discipline Groups and Degree Level

<table>
<thead>
<tr>
<th>ACADEMIC DISCIPLINE GROUPS</th>
<th>ASSOCIATE’S</th>
<th>BACHELOR’S</th>
<th>MASTER’S</th>
<th>DOCTORAL &amp; PROF.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STATE TOTAL</strong></td>
<td>100,910</td>
<td>98,358</td>
<td>32,944</td>
<td>9,028</td>
<td>241,240</td>
</tr>
<tr>
<td>BUSINESS, MANAGEMENT, MARKETING, SUPPORT SERVS.</td>
<td>4,300</td>
<td>23,711</td>
<td>11,024</td>
<td>121</td>
<td>39,156</td>
</tr>
<tr>
<td>HEALTH PROFESSIONS AND RELATED PROGRAMS</td>
<td>21,168</td>
<td>9,880</td>
<td>4,599</td>
<td>2,870</td>
<td>38,517</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>473</td>
<td>5,346</td>
<td>4,331</td>
<td>850</td>
<td>11,000</td>
</tr>
<tr>
<td>HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES</td>
<td>3,469</td>
<td>4,604</td>
<td>774</td>
<td>*</td>
<td>8,852</td>
</tr>
<tr>
<td>SOCIAL SCIENCES</td>
<td>*</td>
<td>8,153</td>
<td>540</td>
<td>110</td>
<td>8,803</td>
</tr>
<tr>
<td>PSYCHOLOGY</td>
<td>*</td>
<td>6,626</td>
<td>1,175</td>
<td>353</td>
<td>8,164</td>
</tr>
<tr>
<td>VISUAL AND PERFORMING ARTS</td>
<td>952</td>
<td>5,246</td>
<td>725</td>
<td>72</td>
<td>6,995</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>*</td>
<td>4,066</td>
<td>2,108</td>
<td>407</td>
<td>6,589</td>
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<tr>
<td>BIOLOGICAL AND BIOMEDICAL SCIENCES</td>
<td>72</td>
<td>4,985</td>
<td>863</td>
<td>256</td>
<td>6,176</td>
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<tr>
<td>COMPUTER AND INFORMATION SCIENCES</td>
<td>2,657</td>
<td>2,703</td>
<td>589</td>
<td>99</td>
<td>6,048</td>
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<tr>
<td>LEGAL PROFESSIONS AND STUDIES</td>
<td>1,485</td>
<td>771</td>
<td>324</td>
<td>3,207</td>
<td>5,787</td>
</tr>
<tr>
<td>COMMUNICATION, JOURNALISM, &amp; RELATED PROGRAMS</td>
<td>14</td>
<td>4,043</td>
<td>415</td>
<td>24</td>
<td>4,496</td>
</tr>
<tr>
<td>TRANSPORTATION AND MATERIALS MOVING</td>
<td>664</td>
<td>1,827</td>
<td>1,221</td>
<td>*</td>
<td>3,712</td>
</tr>
<tr>
<td>PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONALS</td>
<td>35</td>
<td>1,388</td>
<td>1,422</td>
<td>31</td>
<td>2,876</td>
</tr>
<tr>
<td><strong>ALL OTHERS</strong></td>
<td>65,603</td>
<td>15,009</td>
<td>2,834</td>
<td>623</td>
<td>84,069</td>
</tr>
</tbody>
</table>

Note 1: All Others include 61,221 Associate’s degrees assigned to ‘General Studies’. Note 2: An asterisk (*) indicates ten or fewer.
## Gap Analysis: Step 1 of the CIP-SOC Crosswalk

### 1st step: Identify the 6-Digit SOC/CIP relationships

<table>
<thead>
<tr>
<th>SOC Titles &amp; Codes</th>
<th>Medical Scientists, except Epidemiologists (19-1042)</th>
<th>Dentists, General (29-1021)</th>
<th>Family and General Practitioners (29-1062)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Degree CIP Codes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0102</td>
<td>51.0401</td>
<td>51.1201</td>
<td></td>
</tr>
<tr>
<td>26.0202</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0401</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0503</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0806</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0901</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0908</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0911</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.1001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.1102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.1309</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.1101</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CIP codes in RED are associated with more than one SOC code.
Gap Analysis: Step 2 of the CIP-SOC Crosswalk

2nd step: Adjust the supply

In an effort to limit the problem of overstating supply due to occupations being linked to multiple academic disciplines, the supply data was adjusted to only count the target occupation’s share of job openings available for qualified graduates.

<table>
<thead>
<tr>
<th>SOC</th>
<th>CIP</th>
<th>SOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accounting and Finance</td>
<td>Financial Managers 530</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accountants and Auditors 3,237</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Budget Analysts 104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial Analysts 326</td>
</tr>
<tr>
<td></td>
<td>Accounting and Business Management</td>
<td>Financial Managers 530</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accountants and Auditors 3,237</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial Analysts 326</td>
</tr>
<tr>
<td></td>
<td>Finance, General</td>
<td>Chief Executives 660</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial Managers 530</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Budget Analysts 104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit Analysts 124</td>
</tr>
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<td></td>
<td></td>
<td>Financial Analysts 326</td>
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<tr>
<td></td>
<td></td>
<td>Personal Financial Advisors 575</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial Specialists, All Other 275</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPENINGS</th>
<th>BACHELOR’S</th>
<th>NON-MANAGER OPENINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>326</td>
<td>3,093</td>
<td>4,641</td>
</tr>
</tbody>
</table>

ADJUSTED SUPPLY

In this example, only 7% of the total supply (3,093 graduates) is used in the gap analysis because the Financial Analysts only comprise 7% of the 4,641 non-managerial jobs available to these graduates. So, the adjusted supply is 3,093 x .07 = 217.
SUBJECT: Emerging and Evolving Health Occupations

PROPOSED COMMITTEE ACTION

For information

AUTHORITY FOR BOARD OF GOVERNORS ACTION

Article IX, Section 7, Florida Constitution

BACKGROUND INFORMATION

As part of its environmental scan, the Health Initiatives Committee and Advisory Group will hear a brief presentation from staff on the topic of emerging and evolving health occupations. Emerging occupations are newly forming occupations in which new skills and competencies in the workforce are becoming formally recognized. Evolving occupations are occupations that currently exist but are being redefined by changes in necessary skills and competencies. The Committee and Advisory Group will review and advise on health occupations for which demand projections show few annual job openings but a relatively high job growth rate, which could indicate an occupational shift.

Board of Governors Regulation 8.011 guides the review of new doctoral program proposals and stipulates, “the proposal shall demonstrate a need for more individuals to be educated in the program at the level proposed, provide an estimate of the headcount and full-time equivalent (FTE) for students who will major in the program, and indicate steps to be taken to achieve a diverse student body.” Demonstrating need for emerging and evolving occupations requires special considerations. The use of the Bureau of Labor Statistics methodology for determining the workforce demand for some emerging and evolving occupations is complicated by the fact that demand projections reflect typical entry-level education. For program proposals where the degree proposed is higher than the typical entry-level education, determining the demand for a program’s graduates requires additional market analysis.

In anticipation of three practice-oriented doctoral proposals being presented for approval by the Board of Governors in March 2015, staff will seek feedback from the Health Initiatives Committee’s Advisory Group on market demand for clinical
nutritionists, clinical social workers, and nurse practitioners at varying degree levels. Specifically, the Advisory Group will consider evidence of hiring preference, promotion potential, or higher earnings for those who have attained a practice doctorate in these fields.

Supporting Documentation Included: The introduction, and need and demand sections of three program proposals:
1. Doctorate in Clinical Nutrition at UNF
2. Doctor of Social Work (Clinical/Medical Specialty) at FAU
3. Doctor of Nursing Practice at FGCU

Facilitators/Presenters: Ms. Amy Beaven
INTRODUCTION

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

Clinical nutrition practitioners integrate and apply the principles derived from the sciences of nutrition, biochemistry, food, physiology, and management and the behavioral and social sciences to promote, achieve and maintain a person’s health throughout the person’s life. Clinical nutrition is an integral part of preventive, diagnostic, curative, and restorative health care of individuals, groups, and it includes assessing nutrition needs and status using appropriate data; recommending appropriate dietary regimens, nutrition support, and nutrient intake; improving health status through nutrition research, counseling, and education; and developing, implementing, and managing nutrition care systems. This includes, but is not limited to, evaluating, modifying, and maintaining appropriate standards of high quality in food and nutrition care services in clinical health care, public health, and a variety of other settings. (adapted from the Florida Statutes 468.503, Definitions) The Doctorate in Clinical Nutrition is an advanced practice doctorate which is defined by the Academy of Nutrition and Dietetics as follows: The practitioner demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes. Advanced Practice Doctoral-level programs are designed to prepare already credentialed or licensed individuals to practice with competencies above and beyond those expected of entry-level professionals. The master’s level degree will become the entry level requirement for the nutrition and dietetics profession in 2024 and the doctoral degree will become the advanced level degree. These advanced level practitioners are clinical scholars skilled in outcomes based research.

Level: Doctorate in Clinical Nutrition (DCN)
Concentration: Chronic disease prevention and treatment through clinical nutrition
Total Credit hours: 54

Overall purpose: The purpose of the proposed program is to prepare advanced level nutrition and dietetics practitioners who will assume leadership positions in health care organizations to conduct outcomes based research, improve quality of care and reduce health care costs. Most graduates of the proposed program will work in clinical and community settings demonstrating advanced knowledge and competence related to nutrition and health and a minimal number may be employed in higher education, primarily as directors or faculty teaching in the entry level master’s practitioner programs. Outcomes research will focus on the establishment of evidence-based nutrition practice in a variety of settings.

Example of employment opportunities available to program graduates:
According to the Academy of Nutrition and Dietetics, “... in addition to clinical, a large number of practitioners work in community and public health settings as well as in academia and research.” This is expected to continue but the doctorate prepared practitioners will be positioned to readily move to leadership, policy and other positions that perform outcome measures and establish evidence-based protocols and practices. The goal of our DCN is to provide the advanced practice needed to meet market and professional needs and continue the high standards and national recognition established for our
current programs. The proposed DCN will have an emphasis on the application of evidence to practice, critical thinking, and the production of evidence-based clinical data that impacts health practice and policy. This represents a potential market of students both from within and outside the state. Within Florida, there are over 3000 Registered Dietitians and 40% have a master’s degree. Their practice profile closely aligns with the national data that follows. Nationally there are 80,000 Registered Dietitians, in the primary and emerging areas of acute inpatient care (32%), ambulatory care (17%), food and nutrition management (12%), community nutrition (11%), long term care (8%), consultation and business (8%) and education and research (6%). This represents approximately 59 core position descriptions and 93% of dietetics employment situations (AND Compensation and Benefits Survey 2013; p 29). Graduates of this program will assume leadership positions in all of these areas providing a mechanism for career laddering.

The employment opportunities that will be available to program graduates are extensive, varied, and stem from two areas: 1) current and emerging new practice areas related to the Affordable Care Act with an emphasis on prevention of chronic disease, 2) management of chronic disease, and 3) the demographic dynamics of current practitioners. Demographically, a large number of practitioners are aging with 29% of dietetics and nutrition practitioners 55 or older with a median age of 46 years (in the 2005 survey only 15% were 55 or older and the median age was 44 years). In addition, only 4% of the 80,000 currently have doctoral degrees (AND Compensation and Benefits Survey 2013; p 2 & 7) and they are a large part of the 55 or older group.

B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at http://www.flbog.org/about/strategicplan/)

The proposed dietetics degree program is part of the UNF Master Plan and is included in the current SUS Strategic Plan List of Academic Degree Programs for Exploration. The DCN degree program supports the goals listed below:

Goal 1: Teaching and Learning Excellence and Productivity: Strengthen Quality and Reputation of Academic Programs and Universities and Increase the Number of Degrees Awarded in STEM and Other Areas of Strategic Emphasis.

A DCN will produce advanced practice graduates in a STEM discipline. This will increase the reputation of the SUS for having a unique, high quality advanced level degree in an important health practice area. This degree addresses other areas of strategic importance to the state: the increased educational preparation of practitioners with the skills to effectively develop, evaluate, lead and monitor nutrition programs for quality and effectiveness. Graduates of the DCN will assume leadership positions and increase the mean salary of the state’s nutrition and dietetics practitioners. Potential candidates from Florida for the proposed DCN degree are experienced practitioners in Food and Nutrition Service (~432), Clinical Nutrition (~1470), Community settings (~330), Corporate settings (240), Media positions (~30), etc. whose median salary ranges $65,000–98,000 (Estimate of numbers from extrapolation of the national percentages applied to Florida’s 3000 Registered Dietitians; AND Compensation and Benefits Survey 2013; p 3). All of these positions would likely increase salary with additional education as would their professional growth opportunities. Doctoral prepared position salaries range from $50,000 (10th percentile) to $129,000 (90th percentile) depending on years of experience. Registered Dietitian salaries are much lower, ranging from $42,000 (10th percentile) to $88,000 (90th percentile) for a baccalaureate level degree (AND Compensation and Benefits Survey 2013; p 41). In Florida and elsewhere, a higher level of preparation increases compensation and benefits for both the practitioner and the economy.

Goal 2: Scholarship, Research & Innovation: Strengthen Quality and Reputation of Scholarship, Research and Innovation, and Increase Collaboration and External Support for Research Activity.
This degree is innovative – the only practice-based doctoral degree in nutrition in the southeast – while simultaneously including the traditional element of a strong evidence-based/research component. All students in the DCN will be required to conduct research, primarily as applied practice evidence-based outcomes. This program will subsequently greatly increase the research productivity of the College and University and help provide solutions to cost, quality of care, and morbidity and mortality concerns related to nutrition and health. Moreover, the clinical and applied quality of the research requires collaboration with external organizations, an important strategic priority for the knowledge economy. With the rise in overweight/obesity and the subsequent health risks (e.g., the increase in chronic diseases, such as cancer, heart disease, and diabetes), the demand for advanced level practice dietitians will increase. This program directly supports this increased demand and addresses research and scholarship priorities.

Goal 3: Strengthen Quality and Recognition of Commitment to Community and Business Engagement, Increase Levels of Community and Business Engagement, and Increase Community and Business Workforce.

UNF’s Department of Nutrition and Dietetics places students and has long established relationships with all of the surrounding hospitals, the county health departments, long term care facilities, renal dialysis clinics, and non-profit agencies providing services to children, the homeless and the elderly. This program will strengthen the commitment to the community demonstrated by our current students and provide a higher level of support when doctoral students are placed here and in other counties in Florida for their outcomes based residency projects. These sites already hire master’s level graduates and will be an employment resource for the doctoral graduates throughout the state. The proposed DCN will include community-based engagement as part of the outcomes based residency requirement.

Goal 4: Meeting community needs and fulfilling unique institutional responsibilities.

This program prepares advanced-level nutrition professionals who are critical resources for promoting the optimal health and nutritional status of the public, thus clearly consistent with the missions of the College and University. The majority of students will be employed in clinical and community sites and will increase their engagement in leadership and service activities through the residency outcomes based research requirement. The DCN will increase the skill capacity of practitioners in health care facilities, organizations and non-profits and help meet the demand for leaders, policy makers, and high-level quality practitioners in these settings.

C. If the program is to be included in an Area of Programmatic Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.

The Areas of Programmatic Strategic Emphasis:

1. Critical Needs
   • Education
   • Health Professions
   • Security and Emergency Services
2. Economic Development
   • Globalization
   • Regional Workforce Demand
3. Science, Technology, Engineering, and Math (STEM)

This proposal directly meets several Programmatic Strategic Emphasis Areas of Critical Needs including education, health professions, regional workforce demand and STEM. It will meet a documented regional, state and national workforce demand for advanced practice nutrition professionals (the Dietetics Workforce Demand Study conducted by The Lewin Group projected a growing demand for specialists and advanced-practice RDNs based on projected increases in health problems...
associated with aging, diabetes and obesity, augmenting the need for RDNs with specialized knowledge and skills in these areas of practice). This demand was established by the precipitous rise of overweight, obesity, diabetes, and other chronic conditions which have created a national awareness for nutrition education, lifestyle and behavior change management. This highlights the need for an advanced practice workforce prepared to work at the local, state, and national levels.

While entry-level practitioners are the bulk of the current workforce, the Academy of Nutrition and Dietetics has affirmed the increasing need for specialist and advanced level practice education. The complexity of the health system, the multivariate influences on weight and the prevalence of multiple chronic conditions require highly skilled practitioners and clinical scholars. In the current health care environment, there is a rapidly increasing need for dietetics practitioners to expand their scope of practice in multiple areas such as program development and outcomes evaluation, medication management and food/medication interactions, feeding tube placements and evaluation, waived point-of-care, laboratory testing, physical assessment to help coordinate care in disease-specific areas, human resource management, and management of clients with multiple complex disease issues. All of these roles demand not only advanced knowledge skills, and the ability to design and conduct research but additional competencies in critical thinking, evaluation, and management. If the SUS is to address workforce needs and prepare practitioners who can address the critical issues affecting the state such as health status of the population and health care costs and potentially serve as a model to other states, a DCN in the 51.3102 category should be included (www.fldoe.org/cc/docs/102908StrategicGoals.doc).

D. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

The program will be a distance learning doctoral degree in order to reach a wider group of students than would be able to complete an onsite doctoral degree. The vast majority of the candidates for this degree would already be employed as registered dietitians with master’s degrees who are unable to leave their work environment for the approximate three to four years required to complete the degree. The flexibility of distance learning will provide professionals who have a need for advanced level knowledge and skills in nutrition and dietetics the option of obtaining the advanced practice competencies without leaving their geographical area and enable them to implement evidence-based outcome studies in their work settings.

INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

Currently there is one Doctorate of Clinical Nutrition (DCN) program at Rutgers University in New Jersey. According to enrollment and curriculum discussions with Drs. Julie O’Sullivan Maillet and Riva Touger-Decker, Directors of the Rutgers program, their DCN program easily meets its enrollment targets for candidates. The program at Rutgers has two annual admission cycles and gets approximately 20 applicants and selects 8-12 persons per year. (E-mail from Dr. Touger-Decker, 7/2/14). Their DCN graduates are employed predominantly in health care facilities with smaller numbers in the food and pharmaceutical industry and in university faculty positions. Dr. Touger-Decker in her letter of support for our proposed program stated, “Doctoral degrees in philosophy (PhDs), Education and Public Health as well as Science offer routes for those who seek these areas of focus. We need doctoral degrees for those
in clinical practice who can grow the body of practice based research and develop the body of scientific evidence to support clinical nutrition practices”.

Nationwide, of the approximately 80,000 dietetics and nutrition practitioners, 42% currently hold a master’s or doctoral degree (33,600), of which 4% (3,200) hold a doctoral degree and 38% (30,400) hold a master’s degree. This represents a large population of potential candidates for the DCN.

<table>
<thead>
<tr>
<th>Practice Area Rank</th>
<th>Expected Demand Growth (%)</th>
<th>Fulltime Employment Shortfall Estimate (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical nutrition- inpatient and outpatient</td>
<td>42%</td>
<td>10,000+</td>
</tr>
<tr>
<td>Clinical nutrition- long term care</td>
<td>36%</td>
<td>1,900</td>
</tr>
<tr>
<td>Food and nutrition management</td>
<td>35%</td>
<td>1,200</td>
</tr>
<tr>
<td>Community nutrition</td>
<td>34%</td>
<td>2,900</td>
</tr>
<tr>
<td>Consultation and business</td>
<td>28%</td>
<td>900</td>
</tr>
<tr>
<td>Education and research</td>
<td>24%</td>
<td>400</td>
</tr>
</tbody>
</table>

Roderick S. Hooker, PhD, MBA; James H. Williams; Jesleen Papneja, DDS, MHIS; Namrata Sen, MHSA; Paul Hogan, MS. Dietetics supply and demand: 2010-2020. J Acad Nutr Diet 2012;112(3) (suppl1):S75-S91.

The Bureau of Labor Statistics acknowledged in its report that dietitians with “specialized training, an advanced degree, or certifications beyond the particular State’s minimum requirement should enjoy the best job opportunities”. The Academy of Nutrition and Dietetics’ Visioning Report Recommendation #1 is to elevate the educational preparation for the future entry-level RD to a minimum of a graduate (MS) degree. The accrediting body for dietetics education, ACEND has agreed and the Master’s level degree is becoming the entry level requirement by 2024. Universities must notify students beginning in 2017 of this change. The anticipation of this change will have the immediate effect of creating a significantly larger workforce demand for doctoral level practitioners and clinical scholars whose responsibilities are beyond those of the master’s entry-level prepared practitioner and who conduct supervised practice and didactic training for the master’s prepared entry level practitioner. UNF’s program will position the state to be a leader in addressing the need for doctoral prepared clinical nutrition practitioners who are DCNs in addition to the graduates from the three nutrition PhD programs already in the SUS.

However, even with the current bachelor’s, master’s and PhD nutrition programs in the state, Florida ranks 46th in the nation in the ratio of dietetics practitioners per 100,000 citizens. In the dietetics profession, based on historical work force data, a rate of attrition (dietetics practitioners who leave the work force for reasons of emigration, extended leave, retirement, or death) of 2% to 5% is expected which will also have an impact on supply. The work force is currently largely female, older, and white/non-Hispanic. Only 8% of dietetics practitioners currently practice in research and higher education (6,400). However, 33% desire advanced certification or an advanced degree. (Roderick S. Hooker, PhD, MBA; James H. Williams; Jesleen Papneja, DDS, MHIS; Namrata Sen, MHSA; Paul Hogan, MS. Dietetics supply and demand: 2010-2020. J Acad Nutr Diet 2012;112(3) (suppl1):S75-S91.)

Given the lack of clinical doctorates currently available in the profession, most practitioners desiring an advanced degree have sought a PhD in nutrition or in other emphasis areas such as public health, epidemiology, health care administration, food science, anthropology, educational leadership, business psychology, or sociology. According to National IPEDS data on graduates of nutrition and dietetics PhD Programs in 2013, 29 PhDs were produced in Foods, Nutrition and Wellness, 14 in Human Nutrition, 1 in Dietetics, 6 in Clinical Nutrition, and 97 in Multidisciplinary Studies in Nutrition Science for a total of 144 nationwide. http://nces.ed.gov/programs/digest/d13/tables/dtt13_318.30.asp It is not a coincidence that both DCN programs, the Rutgers existing program and the UNF proposal, are offered by distance learning in order to capitalize on this national market for advanced practice doctorates.
According to the American Hospital Directory there are 212 hospitals in Florida. Each is required to have a minimum of one full time dietitian or more depending on the number of total and critical beds. Depending on their size, many have staffs of 5-10 dietitians. The Agency for Health Care Administration reports 682 long term care facilities and all are required to have a dietitian full time or as a consultant depending on the number of beds. All of these facilities require registered dietitians as supervisors and clinical managers and most are currently at the master’s level. When the master’s becomes entry level, these supervisors will be required to be doctoral prepared. A secondary employment opportunity for graduates of the DCN will be as university faculty. Students prefer faculty who have been practitioners. A survey of the three other SUS institutions in the state that have PhD programs in nutrition and dietetics reported that each has had difficulty in recruiting doctoral level faculty and foresee the demand to only increase. With only 4% of the 80,000 Registered Dietitians in the country holding doctoral degrees coupled with the expected attrition, nationwide demand for nutrition and dietetics faculty is increasing.

Local and regional employers also indicated in their letters of support that it would be their desire to hire individuals who have earned the Doctorate in Clinical Nutrition, e.g. Mayo Clinic, Baptist Health Systems, Brooks Rehabilitation Hospital, Duval County Health Department, Nassau County Health Department, and the University of Alabama. The Director of the Florida Department of Health, Duval County stated “At the community level, they may supervise public health nutrition programs, feeding programs, and non-profits whose focus is to provide nutritious foods to various populations including the young, the elderly, and in between.” Margaret Garner from the University of Alabama stated “Educational institutions that develop programs to meet state, regional, national and global needs must be sensitive to the needs of these communities. A practice doctorate provides research opportunities in the practice sites where results can be applied immediately rather than in the traditional PhD which often focuses on bench or lab research which may take years to reach practice. Many of these DCN students will come from Florida and the southeast, bringing their practice based research to their health care facilities. As our health care institutions are strapped for resources, our educational institutions can maximize the experience of our faculty, students and the learning environment of our communities to create and sustain a win-win relationship. Applied research benefits everyone when it specifically addresses the needs and the desired outcomes. Every aspect from the client/patient’s health, to student learning, the community institution’s reputation and mission, and the educational institution’s commitment to advance education and research will show benefit”.

The CDR 2011 Dietetics Workforce Demand Study Results and Recommendations future scan identified aging as one of the 10 change drivers anticipated to have the greatest impact on the dietetics profession’s workforce supply and demand. The anticipated growing demand for specialists and advanced practice doctoral level RDs based on issues related to aging, diabetes, obesity, treatment centers, etc. are of major interest and concern in both the state of Florida and the nation. Finally, with increased public awareness of obesity, diabetes, high blood pressure, and renal disease, Medicare coverage has expanded to include medical nutrition therapy for renal and diabetic patients creating job growth for advanced-level dietetic practitioners.

The Academy of Nutrition and Dietetics House of Delegates’ Executive Summary Spring 2012 stated that “A constant flow of high quality, professional education opportunities must be provided, using all available technology and delivery methods to facilitate movement up the career ladder and support the growth and development of (advanced practice)”. The House of Delegates’ Fact Sheet Spring 2012 further stated “…the demands of future practice roles will be best achieved by focusing on specific educational opportunities tailored to specialist practice and advanced practice”. 

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B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

Several sources of data demonstrate that students will enroll in the proposed program. A sample of 75 Registered Dietitians in Florida reported that the majority currently work in health care clinical settings and community health. Fifty-seven of respondents reported that employers of DCNs will benefit from enhanced leadership skills and 43% reported benefit from quality care outcomes measurements. Thirty nine percent said they would prefer a DCN over a PhD degree, 24% said they would not prefer a DCN over a PhD, 35% were unsure and 2% did not reply. Seventy five percent of those considering a doctoral degree reported they would be likely to enroll in a DCN degree in the next five to ten years.

During the summer of 2012, we also conducted an informal survey of current UNF nutrition students. Of the 54 students that responded, 23 indicated “yes” and 1 responded “no” to the question “I think that (UNF) offering a distance learning doctorate in clinical nutrition, with an emphasis on evidence-based advanced practice is a good idea.” In addition, 27 of the 54 respondents indicated that they would consider a distance-learning DCN. Others offered some comments qualifying components of a program (e.g., courses they would like to take, how the degree might be structured). This indicated that roughly half of these future practitioners would consider a doctoral degree. While this is only an informal survey, it provided positive data about potential interest and intent, and it indicated new practitioner alignment with the profession’s move toward advanced practice.

In addition, Eduventures, Inc., a consulting firm, conducted a needs assessment for the online DCN for the UNF Graduate School and concluded “UNF’s plan to deliver the proposed program online is aligned with target audience preferences and may attract prospects across the U.S. and internationally. Online delivery will likely be preferable, as most prospects will need to continue working while enrolled…. The Eduventures report also cited that currently only 5% (this is in contrast to the national data from the work force demand study cited earlier which listed 4%) of practicing Registered Dietitians have a doctoral degree and the demand will increase due to the “shortfall of professionals qualified to fill future faculty positions and other leadership positions that require or prefer a doctorate, given the small number who possesses a doctorate.” According to the Commission on Dietetics Registration, clinical nutrition is the largest dietetic practice segment. This indicates UNF’s proposed doctorate in clinical nutrition will appeal to a large target audience within the nutrition and dietetics field”. April 2012. Eduventures. A Needs Assessment for an Online Doctorate in Clinical Nutrition, p. 11 and 16.

C. If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix B, provide data that support the need for an additional program as well as letters of support, or letters of concern, from the provosts of other state universities with substantially similar programs.

There are no similar programs in the state or the southeastern region of the U.S. in either public or private institutions. The only similar program in the U.S. is the DCN at Rutgers University and a letter of support from that institution is enclosed with this document. UNF’s program will position the state to be a leader in addressing the need for doctoral prepared clinical nutrition scholars with expertise on evidence-based outcomes (in addition to the graduates from the three nutrition PhD programs in the SUS).

D. Use Table 1 in Appendix A (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary
INTRODUCTION

I. Program Description and Relationship to System-Level Goals

II. DESCRIPTION

Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

Program description and relationship to system-level goals
(a) The School of Social Work proposes a Doctor of Social Work (DSW) program.

(b) This program will be an advanced clinical practice degree emphasizing evidence-based clinical social work services provided to individuals, families, and groups, especially in social service, health and mental health care settings. It will prepare students for leadership roles in clinical social work, including specialized clinical assessments, psychosocial interventions; social service administration and leadership; social work research and evaluation; and social work education.

(c) DSW students must complete a minimum of 50 credits to qualify for their degree. (An MSW from an accredited program is required for admission to the DSW program).

(d) This program prepares graduates for leadership roles in advanced clinical social work, clinical supervision, and social work education (as clinical faculty for schools of social work teaching various levels of clinical practice). A DSW degree differs from a PhD in Social Work, in that a PhD is primarily a research-oriented degree preparing graduates for advanced research and academic positions that are research intensive. A DSW degree includes practice-oriented research and evaluation that focuses on preparing students for innovative, complex, and sophisticated areas of practice (i.e., evidence-based practices in areas that focus on the health and mental health needs of populations in south Florida). Graduates from this program should be able to take leadership roles in social service, health, mental health, and educational settings, as well as generate a body of clinical social work practice research. The practice focus of a DSW degree is similar to that of advanced practice degrees offered in other professional disciplines such as psychology (Psy.D.), nursing (DNP), pharmacy (PharmD), physical therapy (DPT), and nutrition (DSN).

The DSW degree was first offered in the early 1900s, but became less

Now is an opportune time to develop a DSW program. Few schools, nation-wide offer it, and none in Florida do. Our MSW program has grown exponentially since its 2000 introduction. The School of Social Work has the personnel platform from which it could step up to the next level. With 15 years’ worth of FAU MSW graduates in the region, there is also considerable, pent up market demand for the DSW. And FAU will enjoy the benefit of “first market advantage” as it quickly establishes a niche for what we believe will be a strong, and growing, academic market. This development, in turn, goes hand in glove with the School’s commitment to enhancing its research productivity, community and student responsiveness, national and international reputations, and its contributions to the region’s social and economic growth.

A. SUS GOALS
Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at http://www.flibog.org/about/strategicplan/)

The State University System of Florida Board of Governors Strategic Plan, Board of Governors Strategic Plan 2012-2025 (approved on November 10, 2011)

The DSW is a response to evolving and emerging critical needs in Florida, as well as across the nation. The DSW will help address most specifically to the critical need of providing effective clinical social services. A 2009 report by the Florida Center for Fiscal and Economic Policy found, “Of the 325,000 adults with severe and persistent mental illness in Florida, only 42 percent receive state mental services at the current funding level. The situation for Florida children is also poor. Fifty-two percent of children with mental illness receive care in Florida, compared to 60 percent nationally” (Mental Health Funding at Risk, Center for Public Integrity, Florida Council for Community and Mental Health, March 9, 2011). To meet the need to treat the numbers
of mentally ill Floridians, the DSW will provide highly specialized doctoral
level practitioners to provide effective evidence based clinical services, to
plan and evaluate programs and services, to teach in baccalaureate and
graduate programs, and to provide evidenced-based practice research. The
DSW level graduates will be appropriately trained for supervision and
administration of programs.

GOAL: Strengthen the Quality and Reputation of Scholarship, Research,
and Innovation: Improve the quality and impact of scholarship, research,
and commercialization activities, and grow the number of
faculty/departments/centers and institutions recognized for their
scholarship, research, and commercialization endeavors.

• The DSW program will help the School of Social Work develop
additional partnerships with social service, health and mental health
service providers in the community, in order to develop and evaluate
new responses to psychosocial health needs. The research within the
DSW program will have an applied focus, so various mental health and
social service providers will value the research results. The School’s
reputation will increase markedly, as the region’s DSW cohort grows,
and the cumulative impact of DSW research and our School’s growing
research trajectory both become apparent. As the DSW grows in
reputation, we will seek candidates state-wide, and nationally – again,
contributing to the School’s longer term emerging reputation.

GOAL: Increase Collaboration and External Support for Research Activity:
Attract more research funding from external (includes federal and private
sources.

• Our school currently has a talented faculty with proven track records in
publishing, and growing accomplishments in seeking external funding.
By having a doctoral program, faculty will be able to apply for and
attract more outside funding, particularly as some funders require
applicants to have doctoral programs. Further, the program will be able
to attract more faculty members interested in careers at doctoral-level
institutions that encourage external funding, collaboration with
research teams, and extensive publishing. As prospective leaders in
social work, our DSW graduates will develop skills and experience in
grant writing, research proposal writing, agency contracting, and
program implementation. These capacities will return to the
community, where a growing cadre of community based research
leaders could collaborate with our School in grant seeking and myriad
research activities – leading to still greater external resources for the
School and its DSW program over time.

• The DSW program will allow us to promote greater collaboration with
private industry on research projects (including service providers for health, mental health, addictions, children's services, and services for the elderly).

- With implementation of the new Affordable Care Act, social workers are playing more important roles in health care services. This is especially true in the area of mental health. Social workers also play a key role in reducing re-admissions to hospitals after surgery or other invasive procedures. In the United States, clinically trained social workers provide over 60% of mental health services (http://www.naswdc.org/pressroom/features/issue/mental.asp). In private industry, the need for more social workers trained in evidenced-based mental health treatment has grown substantially. Further, community-based social workers are seen as vital to reducing health care costs associated with unnecessary hospital and nursing home admission/readmissions. These are all areas where collaboration for funding for research into best practices with both private and public health care providers can be enhanced. Advanced doctoral level trained social workers with DSW will be able to provide guidance and leadership in the practice research models necessary to address these issues.

GOAL: Strengthen the Quality and Recognition of Commitment to Community and Business Engagement

- Improve the quality and relevance of public service activities, and grow the number of institutions recognized for their commitment to community and business engagement.

- The number of community partnerships will increase with DSW students working with agencies. This will be done through DSW student internships, research projects, and community training opportunities. Faculty members will also participate in these endeavors.

- The School of Social Work Strategic Plan identified the need for mental health services in our region. Therefore, the School has proposed a plan to work with community partners and advisors to provide mental health services through a School of Social Work teaching and research clinic.

- The development of a DSW program will also help the School provide additional community education programs for practicing mental health professionals, as well as community education programs to assist with health maintenance and primary prevention programs (e.g., regarding addictions, trauma, safety for elders, and domestic violence).
GOAL: Increase Community and Business Workforce
Increase the percentage of graduates who continue their education or are employed in Florida.

- The proposed DSW program will be offered on a part-time basis so that students will be able to continue to work in the community while attending the program. In the program’s first 5 years, we expect that most DSW graduates will remain in Florida to practice as advanced clinicians, program evaluators, and supervisors; some DSW graduates will also move to other areas in order to take academic positions.

GOAL: Recruitment of students, state- and country-wide

- Over time, as its regional and national reputation increases, our DSW program is expected to recruit state-wide and nationally.

B. AREAS of EMPHASIS
If the program is to be included in an Area of Programmatic Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.

The Areas of Programmatic Strategic Emphasis:
1. Critical Needs:
   - Health Professions

HEALTH PROFESSIONS

The delivery of medical social work services in health, mental health and social service settings are increasingly growing in South Florida due to a large number of populations in need, especially the aging population. Further, the demands of the Affordable Care Act and other 3rd party reimbursement companies require that practitioners use interventions that are evidence-based and demonstrate fulfillment of practice competencies.

- The DSW program will prepare doctoral-level social work clinicians to both provide direct services and supervision to clinicians working in areas of health, mental health, and social services in south Florida and the region. The complexity of mental health and health problems are requiring a wider range of clinical skills and supervision than previous times in US history. With the aging of the population in the US and as is first demonstrated in South Florida, FAU School of Social Work has the opportunity to provide more advanced clinically trained doctoral level social workers to improve the mental and physical health of specific populations such as the high concentration of elderly residing in this region. The DSW has recently gained in popularity, particularly
for social workers seeking positions in advanced clinical practice, supervision, leadership, research and evaluation, and as instructors or professors for clinical practice courses in BSW and MSW programs (Barsky, A. E., Green, D., & Ayayo, M. (2013). The need for advanced training in clinical skills has become increasingly evident. Supervision and administration of MSW level social workers is also needed by higher levels of education which can be provided by DSW trained social workers. Hiring priorities for BSW/MSW programs in the United States: Informing doctoral programs about current needs, Journal of Social Work. 13(2), 1-21. doi:10.1177/1468017313476772).

- Social workers with DSWs will be able to provide leadership in the development and evaluation of innovative, evidence-based practice in a broad range of contexts, including education, health and mental health, addictions/substance use, child welfare, aging, HIV and AIDS, divorce, family conflict, domestic/intimate partner and community-based violence, criminal justice, poverty and unemployment initiatives, discrimination, and disaster preparedness and response. They will be able to provide supervision and leadership to MSW level social workers within a myriad of agencies.

- The DSW will develop knowledge that results in more effective and efficient practices in a range of contexts of mental health, health and social service practice. The DSW will help develop, foster, and raise standards of practice in all fields of social work practice, including such areas as child welfare and aging, which are particularly in need of better developed evidence-based knowledge and practice skills. Further, clients, government, insurance companies, hospitals, clinics, and other stakeholders in health and mental health services are demanding higher levels of competency, accountability, and evidence of the cost-effectiveness of services. In responding to these needs, DSW graduates will enhance the state’s social welfare tapestry, leading to systems improvements, service improvements, efficiencies, and therefore potential costs savings.

C. LOCATION

Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

The DSW program is to be offered on the Boca Raton campus (as well as through some online courses).
INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

III. Need and Demand

A. NEED

Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.


A think tank, Advanced Practice Doctorates: What Do They Mean for Social Work Practice, Research and Education, "was convened under the auspices of the NASW Social Work Policy Institute on September 23-24, 2013 in Washington, DC. It was co-hosted by the National Association of Social Workers (NASW), the Council on Social Work Education (CSWE), the National Association of Deans and Directors of Schools of Social Work (NADD), the Association for Baccalaureate Social Work Program Directors (BPD), the Group for the Advancement of Doctoral Education (GADE), the Society for Social Work and Research (SSWR), the St. Louis Group for Excellence in Social Work and Research (SLG), and the Association of Social Work Boards (ASWB). It was also supported by Boston College, Case Western Reserve University, New York University, Ohio State University, Rutgers University, University of Denver, University of Michigan, University of Southern California and University of Tennessee."

Among the conclusions laid out in the Advanced Practice Doctorates:

"Advanced practice doctorates in social work are continuing to emerge and demand is represented by the number of students ready and willing to invest in acquiring such degrees.
Advanced practice doctorates in social work can be vehicles for producing practice relevant knowledge and for disseminating research to practice.” (Action Brief, 2013, pp. 1-2).

One of the report’s authors, Professor Jeane Anastas, NASW President and Professor, Silver School of Social Work, New York University, writes: "If DSW programs are developed thoughtfully with the emphasis of developing
not only advanced practice knowledge and skills but sophisticated practice-based research as well, the potential for enhancing the research capacity of our profession is great". (Full report, p. 6).

The DSW is a thoughtful response to the changing nature of doctoral education. The conventional PhD is being re-examined across the disciplines. There are over 50 PhD programs in social work country-wide, including FIU, USF, and Barry in Florida.

The DSW differs from other social work doctorates in that it is a professional practice degree, designed to prepare students for advanced clinical practice and advanced practice leadership. Geared toward working professionals, the DSW is an intensive accelerated program that enables students to satisfy all degree requirements in three years, without career disruption.

There is an emerging market for an innovative Doctor of Social Work – intended to train advanced practitioners for evidence-based research, knowledge production, and community knowledge mobilization.

Nation-wide, there few schools of social work have the DSW, and none have had the program for greater than 10 years. DSWs are available at Pennsylvania, Rutgers, Tennessee, Aurora, and are expected to launch next year at Tulane, St. Catherine University – University of St. Thomas, among others. FAU will be one of the early innovators of this program, and the state’s first. The State of Florida does not currently have a DSW program.

Florida’s doctoral programs in social work are PhD programs which generally emphasize research. The DSW concentrates on developing advanced clinical social work skills as well as applied research that advances evidence-based clinical practice.

The DSW is responsive to part time studying through
-Innovative Course Modules focusing on evidence based practice, and community knowledge mobilization/deployment/relevance.
-Intensive weekend learning for fulltime practitioners leading to degree completion in 3 years.

Outcomes:
-Intensive, accelerated programming that enables students to satisfy all degree requirements in 3 years, without career disruption.
-Cutting-edge courses that focus on the latest breakthroughs and techniques in clinical practice, clinical research and teaching, taught by renowned faculty and clinical experts.
-A published peer reviewed research article that allows students to become content experts and contribute to the professional practice knowledge base.
Increasing community-university engagement that contributes to the School's growing community based research activities.

Responsiveness to community need:
- The School has operated a successful MSW since 2000. There is now a generation of senior clinicians, supervisors, and administrators who would greatly benefit from additional training regarding advanced social work social and behavioral science research and knowledge development. The curriculum capitalizes on the most current research in the social, health, and social work sciences, using this interdisciplinary platform as a basis for creating new knowledge for the highest level of evidence-based social work practice.
- This training will further enhance the social welfare labor market of southern Florida; and once that market has been met, greater Florida and the country.
- The community's changing social and demographic circumstances requires innovative knowledge production that is in the field.

Responsiveness to part time studying through
- Innovative Course Modules focusing on evidence based practice, and community knowledge mobilization/deployment/relevance.
- Intensive weekend learning for fulltime practitioners leading to degree completion in 3 years
- DSW graduates will be adjuncts; bridging connection between adjunct instructors and School's central mission of knowledge mobilization/training at the advanced level
- Practice research projects will bridge the gap between community and university

In alignment with School mission to be increasingly research focused and community-driven in its activities

- Another potential advantage for DSWs over PhDs is preparation for teaching. Typically, PhD programs do not offer courses on social work pedagogy. The DSW program planned for FAU would include a course on social work education (including the theory of teaching and learning, teaching skills, curriculum development, and evaluation). Improvements in teaching theory, methods, and research will have positive impacts not only for social work students, but also for the many people they serve.

- The proposed DSW program addresses the need for working individuals that are place-bound by offering courses face-to-face (on campus) once per month (75%), with the remainder of the program to be offered online (25%). The program is constructed for the student who is already employed in the work force as a social work practitioner and may have other life course demands (e.g., family, etc.).
The need for reinvesting in social work services has been recognized by a number of members of Congress. The *Dorothy I. Height and Whitney M. Young, Jr. Social Work Reinvestment Act* is the most comprehensive piece of federal legislation aimed at addressing the significant workforce challenges facing the profession of social work. Congressman and social worker, Edolphus Towns (D-NY) introduced H.R. 5447 on February 14, 2008 and Senator Barbara Mikulski (D-MD) introduced the Senate companion bill, S. 2858 on World Social Work Day, April 15, 2008. This bill was assigned to a congressional committee on May 21, 2013, which will consider it before possibly sending it on to the House or Senate as a whole. Among its many goals, this legislation could provide additional resources for social work education and research.

Research, education and training grants will be made available to institutions of higher education to support recruitment and education of social work students from high need and high demand areas at the Baccalaureate, Masters and Doctoral levels. Grants will also be available for faculty development, which may include DSW graduates. (Source: http://www.socialworkreinvestment.org/content/SWRI-FL-27808-SWRI-SummaryWeb.pdf; https://www.govtrack.us/congress/bills/113/s997#accessed August 31, 2014).

Alumni of DSW from other programs in the US assume senior positions in social service agencies as supervisors, researchers, managers, and leaders. The country's oldest DSW program is at the University of Pennsylvania. Their DSW alumni are employed as:

- Director, Yoon Behavioral Health Center & Assistant Project Director, The Child Center of NY
- Assistant Professor, University of Southern California, School of Social Work
- Counselor at Elementary School in the West Chester Area School District
- Director, African-American Resource Center, University of Pennsylvania
- Director of Patient and Family Services, Abramson Cancer Center, Penn Medicine (http://www.sp2.upenn.edu/people/alumni/dsw/ Accessed September 28, 2014).

B. DEMAND
Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

DEMAND/INTEREST

- The FAU School of Social Work conducted a survey of agency social workers that supervise BSW/MSW students in their field placements
(11/20/2011). Of the respondents (n=50), 40% stated they would be interested in obtaining a clinical DSW.

- Graduates and alumni of the FAU MSW program have continuously requested further specialization in clinical social through a doctoral level program. This interest has been consistently reported since the first graduating class in 2002.

- In annual MSW exit surveys, approximately 30% of respondents have reported that they would pursue a doctorate in social work.

- In a representative sampling of FAU’s MSW students in the fall semester of 2013, interest ranged from 30% to 40% of students in several current classes.

C. SIMILARITY WITH OTHER PROGRAMS

If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix B, provide data that support the need for an additional program as well as letters of support, or letters of concern, from the provosts of other state universities with substantially similar programs.

The State of Florida does not have a DSW program.

There are PhD programs in social work at other state institutions (e.g., FIU, USF, FSU, UCF, etc.) and one private university (Barry University, Miami Shores, FL). Students wishing to pursue a traditional research-oriented doctorate will continue to enroll in these PhD programs.

A letter of support was obtained from Florida International University School of Social Work (See Appendix D).

Other disciplines, such as psychology, nursing and pharmacy have sought to differentiate doctoral level scholars. In the discipline of psychology, doctoral level scholars who follow the traditional research model sometimes referred to as the Boulder model, receive a PhD in psychology. Those doctoral level scholars in psychology who follow the practice scholar model receive a PsyD (Doctor of Psychology).

Similar examples exist in other disciplines such as nursing (PhD in nursing
Introduction

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The proposed Doctor of Nursing Practice (DNP) program at Florida Gulf Coast University (FGCU) will prepare graduates with the advanced nursing knowledge and leadership skills to improve health care outcomes and to provide expert evidence-based nursing care across diverse health care settings and systems. The FGCU DNP program will have two entry points: post-master’s and post-baccalaureate. The DNP program will include both full-time and part-time plans of study to meet the needs of working nurses in the FGCU service area. Approval of this proposal will result in the eventual inactivation of the current Primary Health Care Nurse Practitioner major of the MSN program at FGCU.

The MSN to DNP is for students who have a master’s degree in nursing, regardless of specialty practice, from programs accredited by the Commission on Collegiate Nursing Education (CCNE) or Accreditation Commission for Education in Nursing (ACEN). The MSN to DNP curriculum requires 39 hours of coursework that includes practice hours and the capstone project. The MSN to DNP builds upon the candidate’s specialty practice area through a core that focuses on utilization of research in the practice setting, quality of care delivery, examination of health care outcomes, leadership in practice, and fundamentals of nurse education.

The BSN to DNP is for students who have a bachelor’s degree in nursing from a program accredited by the CCNE or ACEN. The BSN to DNP curriculum requires 84 hours of coursework including (a) 72 credit hours of coursework that focuses on utilization of research in the practice setting, quality of care delivery, examination of health care outcomes, leadership in practice, fundamentals of nurse education, practice hours, and capstone project; and (b) 12 credit hours of coursework in the Family-Nurse Practitioner Concentration or the Adult-Gerontology Primary Care Nurse Practitioner Concentration.

Forecasts for employment of graduates from a DNP program are strong. Employment opportunities include medical practices, hospitals, community health agencies, primary care clinics, and schools of nursing. The Bureau of Labor Statistics 2011-2012 outlook forecasts that advanced practice specialties will be in high demand, particularly in medically underserved areas such as inner cities and rural areas. DNP graduates can also help relieve the national nursing faculty shortage. The American Association of Colleges of Nursing (AACN) 2011-2012 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing identified that two-thirds of the nursing schools responding to the survey pointed to faculty shortages as a reason for not accepting all qualified applicants into programs.

B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support. See the SUS Strategic Plan at http://www.flbog.edu/pressroom/strategicplan.php

The proposed DNP program is consistent with the State University System (SUS) 2012-2025 Strategic Plan of Florida goals related to teaching, research, and public service, and the mission of FGCU. The program will directly support the following goals of the SUS of Florida: 1) strengthen quality and reputation of academic programs and universities, 2) meeting statewide
C. If the program is to be included in an Area of Programmatic Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.

The Areas of Programmatic Strategic Emphasis:
1. Critical Needs:
   - Education
   - Health Professions
   - Security and Emergency Services
2. Economic Development:
   - Globalization
   - Regional Workforce Demand
3. Science, Technology, Engineering, and Math (STEM)

The SUS has designated several disciplines as critical to the service and infrastructure needs within Florida. One such discipline is Nursing. The current national shortage of nurses presents challenges to Florida’s institutions as they work to prepare qualified individuals to meet current and projected nurse shortages. One pivotal obstacle in preparing additional nurses to meet the growing state demand is the lack of qualified nursing faculty, especially in the area of clinical teaching. The proposed DNP program, by its very nature, is rich in clinical practice and can serve to provide graduates with a strong foundation for clinical teaching in nursing education.

The creation of this degree is consistent with the SUS’s strategic plan as it will increase access to both graduate and baccalaureate nursing programs allowing the School of Nursing to eventually recruit graduates of the FGCU DNP program for clinical teaching and faculty positions.

“Nurses prepared at the doctoral level with a blend of clinical, organizational, economic and leadership skills are most likely to be able to critique nursing and other clinical scientific findings and design programs of care delivery that are locally (Florida) acceptable, economically feasible, and which significantly impact health care outcomes (AACN, 2004, p. 3)” Implementation of the recent Patient Protection and Affordable Care Act is expected to increase demands on the health care workforce, nurse practitioner jobs are predicted to grow 94 percent from 128,000 in 2008 to 244,000 in 2025. The FGCU DNP Program plans to increase the workforce of nurse practitioners necessary to meet the demand.

D. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

The program will be offered on the main campus.
II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

Currently, there is a great need for advanced practice nurses and graduates are able to choose from multiple employment opportunities. Positions for advanced practice nurses are projected to grow. At any point in time, considering FGCU’s five county service area, there are a variety of advanced practice settings including hospitals serving in-patients and out-patients, primary care practices, long term care facilities, private clinics, home health, schools and health departments. Local students who completed our current MSN Nurse Practitioner program have tended to remain in the area following graduation and have begun to meet local workforce needs. However, there continues to be significant unmet need for advanced practice nurses in the communities surrounding FGCU.

The School of Nursing is surrounded by counties designated by the Florida Department of Health as having special populations including large numbers of minority or economically challenged individuals and families. These counties also have acute shortages of primary care providers. The School will play a pivotal role in educating and preparing advanced practice nurses to be comprehensive care providers with knowledge and skills necessary to provide fully accountable health care for patients across clinical sites and over time. The proposed DNP program will position the School of Nursing to continue its commitment to this area in providing competent, knowledgeable, and capable health care providers.

The FGCU DNP has been designed to meet the national recommendations and guidelines for preparation of advanced practice nurses. The Institute of Medicine (IOM) 2010 report recommended an increase in advanced practice nurses to meet the demand for safe, high quality, and effective services. In fact, the IOM advocates for “advances in the education of nurses across all levels, improvements in the practice of nursing across the continuum of care, transformation in the utilization of nurses across settings, and leadership at all levels so nurses can be deployed effectively and appropriately as partners in the healthcare team (IOM, 2010 p. xi).”

Further, the FGCU DNP will promote the development of evidence-based nursing practice. According to AACN (2006), “Scholarship and research are the hallmarks of doctoral education… which involves the translation of research into practice and dissemination and integration of new knowledge, which are key activities of DNP graduates. The scholarship of application expands the realm of knowledge beyond mere discovery and directs it toward humane ends (p.11).”

B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

On average, Advanced Practice Nursing (APN) programs consistently experience higher numbers of applicants, fill their cohort groups, and enjoy a highly qualified applicant pool. The growth of DNP programs nationwide since it was first offered in 2000 further indicates there is a high demand for this level of education for advanced practice nurses (AACN, March 2010). The transition to the DNP will allow the FGCU Graduate Nursing Program to admit students to the capacity of the program, thereby better meeting the workforce needs of the clinical
community. Graduates of APN programs receive multiple employment opportunities. One-hundred percent of FGCU advanced practice graduates are employed once certified. Because of the tremendous employment opportunities for APNs, there is a significant demand for positions in APN programs. This demand is reflected by the increased number of applicants to FGCU’s APN programs and the percentage of undergraduate nursing students expressing interest in the APN Program.

Nationally, the DNP is mandated by the American Association of Colleges of Nursing (AACN) for all APNs entering certification programs by 2015. The Commission on Collegiate Nursing Education (CCNE), the accrediting agency for the School of Nursing, will likely only give continuing accreditation to those programs that have moved to the DNP. The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) has mandated that by 2025 all nurse anesthesia programs will award the doctoral degree for CRNAs entering certification programs as part of the certification process rather than a post-certification degree.

Currently, prospective graduate students are looking for the availability of programs that will allow a completion of the DNP after graduation from MSN programs. At present, there are no programs offering the DNP on-site in the five county area served by FGCU. Offering the DNP degree with both the MSN to DNP and the BSN to DNP entry options in 2015 will also put FGCU in a good position to meet the educational needs of advanced practice nurses in the local community.

The School of Nursing (SON) began planning for the transition to a DNP program in 2007. The Graduate Curriculum, Admission, and Progression Committee (GCA&P) conducted a needs assessment, using focus groups and survey approaches to determine perceptions and possible interest in pursuing an advanced practice doctoral degree (see Appendix B). A DNP survey was mailed or given to 150 employed APNs. Thirty-one surveys were handed in to facilitators and 54 were mailed to the SON. The majority of the APNs who completed the survey were over 40 years of age and Caucasian. Twenty-eight percent had a master’s degree and 27% had been a nurse practitioner for greater than 10 years. When asked “Are you thinking about entering a DNP Program?” 20 (13%) stated “yes”, 11 (7.3%) said “maybe”, and 29 (19%) reported a “no”. This most likely reflects the older age of the majority of APNs at the time of the survey as many were planning for retirement. This survey was repeated with graduate nursing students in September 2013 (n= 33). Sixty-one percent (20 out of 33) indicated they were thinking about entering a DNP. The major reasons given for returning to school or to begin a DNP program were to “expand my critical thinking and to grow as a clinician, …to gain additional expertise in assessing the evidence for implementing current guidelines in an ever changing health care environment, and the most important, …to be a part of my own professional development plan”.

Facilitators (Nursing Student Association members) talking with baccalaureate students found an increased interest in BSN students wishing to continue their nursing education. Today, as more students, recent graduates, and currently practicing APNs are aware of and knowledgeable about the DNP degree there has been increased inquiries and interest expressed about the program being delivered at FGCU. This trend was confirmed in communications with the Associate Dean of one of the early DNP programs (personal communication, Dr. Patricia Howard, University of Kentucky, College of Nursing, January 29, 2011). Interestingly, five advanced practice graduates of the FGCU MSN program are currently enrolled in DNP programs.

Information was also sought in 2010 from prospective employers of DNP graduates. All were very enthusiastic and affirmative in regard to hiring the graduates when they completed the DNP program (see Appendix B). Several reported the need for “increased comprehension in scope and in-depth preparation for advanced practice ...as they believed the DNP would be critical in the ever-changing healthcare environment.”

The IOM (2012) report projects that with changes due to the Affordable Care Act there will be an
increased need for nurse practitioners in primary care. According to the IOM report, “for health centers to increase the number of patients served (for medical visits) from 16 million to 30 million, an additional 15,600 to 19,400 primary care providers are estimated to be needed. Using the current skill mix of clinicians, 36 percent of these additional providers—from 5,600 to 7,000—would be NPs/CNMs/PAs. In addition, health centers would require another 11,600 to 14,400 RNs. Assuming that 75 percent of the advanced practice clinicians would be NPs or CNMs, an additional 16,000–20,000 RNs would be required to meet this demand (IOM, 2012 p. 355, F-6).”

Prior to the development of DNP programs, specialization in nursing practice came at the master’s degree level. These programs prepared advanced practice nurses with specialization as clinical nurse specialists, nurse practitioners, nurse anesthetists, and nurse midwives. With the increased complexity of health care, the emphasis on quality outcomes in health care, and the explosion in health knowledge, the American Association of Colleges of Nursing (AACN, 2004) and the Institute of Medicine (IOM, 2010) provided recommendations stating the current preparation of nurses at the advanced practice level needed to be transformed. As a result, the American Association of Colleges of Nursing (ANCC, 2010) redefined nursing education for leadership and direct care roles emphasizing the doctoral level of education for the advanced practice role. In 2004, AACN published a position paper advocating development of the DNP as the appropriate level of education for advanced practice nurses. Moving advanced practice nursing education to the doctoral level is consistent with the education of other health care professions that has either historically been at, or have moved, to the doctoral level: medicine, dentistry, physical therapy, and pharmacy. Furthermore, it is in keeping with the guidelines for preparation of advanced practice nurses at the doctoral level (AACN, 2006).

C. If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research).

The Council of Academic Vice Presidents’ Academic Coordinating Workgroup reviewed the DNP pre-proposal on December 6, 2012. No concerns were noted; the addition of this program to the SUS Academic Program Inventory for FGCU will not result in unwarranted duplication.

Seven universities in the State University System of Florida (Florida Atlantic University, Florida International University, Florida State University, University of Central Florida, University of Florida, University of North Florida, and the University of South Florida) and four private universities (Barry University, Jacksonville University, Nova Southeastern University and University of Miami) in Florida have opened DNP programs.

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<th>Florida Universities Offering Doctor of Nursing Practice (DNP) Programs</th>
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<tr>
<td><strong>University</strong></td>
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<tr>
<td>FGCU Proposed</td>
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<td>Barry University</td>
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<td>FSU</td>
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<td>Jacksonville University</td>
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The recommendation to move advanced nursing practice to the doctoral level has now been endorsed by a majority of the national nursing organizations (AACN, 2010). Nationally, of the 388 nursing programs offering advanced practice nursing (APN) programs, 217 have opened DNP programs and 97 are in the process of planning a DNP program. Student enrollment has gone from 392 students in 2000, to 5,165 in 2009, and to 9,094 in 2011 (AACN). DNP programs in Florida have experienced similar growth. For academic year (AY) 2009-2010 to AY 2010-2011, DNP enrollment in Florida grew 358 percent, which includes an increase of 162 enrolled students (Florida Center for Nursing, 2012). Nationally for 2011-2012, student enrollment in DNP programs increased from 9,094 to 11,575 (AACN, 2013 Fact Sheet).

D. Use Table 1 in Appendix A (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

The projections for student HC and FTE are conservative (see Table 1-B). These projections assume that in year one the average number of students who entered the FGCU MSN program in academic year 2009/2010 through 2013-2014 (n= 8) will enter the BSN to DNP. It is anticipated that two students will enroll full-time in the MSN to DNP and six students will enroll part-time in the MSN to DNP for a total of 8 students in the MSN to DNP. By year five, the number of students enrolled the DNP program is projected to have grown from 16 students to 94 students and these will be a combination of full-time and part-time students. These enrollment projections are comparable to enrollment in programs nationally (AACN, 2010; personal communication, Dr. Patricia Howard, University of Kentucky College of Nursing, January 29, 2011).

E. Indicate what steps will be taken to achieve a diverse student body in this program. If the proposed program substantially duplicates a program at FAMU or FIU, provide, (in consultation with the affected university), an analysis of how the program might have an impact upon that university’s ability to attract students of races different from that which is predominant on their campus in the subject program. The university’s Equal Opportunity Officer shall review this section of the proposal and then sign and date in the area below to indicate that the analysis required by this subsection has been reviewed and approved.

To ensure the desired outcome for student diversity, recruiting efforts will continue within the initial target population area (FGCU’s five-county area: Lee, Collier, Charlotte, Hendry, and Glades) and extend to other geographic regions having larger under-represented populations of prospective students. Outreach approaches may include personal contact with appropriate administrators at historically black colleges and universities (HBCUs) including Florida A&M University (Tallahassee, FL) and Bethune-Cookman College (Daytona Beach, FL), inviting currently enrolled students in the undergraduate level who could transition to the graduate level to consider this degree program; networking with the diverse student population to seek potential enrollees of similar background; contact with professional associations and affinity groups whose