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- Figure 3 Summary of Projected Annual Demand and Annual Supply by Occupation (table currently in Excel), rows on Physicians, last two columns, the supply-demand figures have been replaced with text that reads:
 - See occupational chapter for additional details on GME and demandsupply by specialty area
- P. 2, Table of Contents,
 - Page numbers have changed to reflect the addition of new text and a corresponding page shift
 - A new section titled, **Emerging and Evolving Occupations**, has been added after the Results and Occupational Chapters section
- P. 16, last paragraph, the following sentence was modified:
 - For some occupations, a significant portion of individuals obtain licenses in the state of Florida and then either (1) leave the state within a year or
 (2) fail to move into the state and establish a Florida practice address.
- P. 18, Nursing chapter, first paragraph, the following was deleted:
 - The chapter on Registered Nurses, Nurse Practitioners, and Nurse Anesthetists will be revised based on feedback and additional information from the Health Initiatives Committee's Advisory Group meeting on May 12th. The tables below are provided for discussion purposes and may be modified after review of additional data.
- P. 18, Nursing chapter, a Summary Observation section has been added with the following bullet points:
 - The Florida Department of Economic Opportunity projects 6,979 annual openings for Registered Nurses, 357 annual openings for Nurse Practitioners, and 140 annual openings for Nurse Anesthetists from 2014 to 2022*.
 - Florida produced roughly 8,600 new Registered Nursing graduates, 580 new Nurse Practitioner graduates, and 140 new Nurse Anesthetist graduates in 2012-2013* (those not previously licensed for the specific occupation).
 - Meaningful post-graduation employment data for nursing graduates was not available at the time of analysis due to confounding factors in the reporting by CIP code. However, data from the Florida Center for

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Nursing on nursing employment may provide this additional context going forward.

- Florida issued 22,965 new Registered Nurse licenses, 523 new Nurse Practitioner licenses and 165 new Nurse Anesthetist licenses in 2014* (includes licenses issued to Florida graduates and in-migration); 14,256 with an in-state active Registered Nurse license, 256 with an in-state active Nurse Practitioner license, and 44 with an active in-state Nurse Anesthetist license remain in Florida the following year.
- A final supply-demand gap analysis for the nursing occupations is not 0 available at the time of print for this report. The analysis requires consideration of additional contextual factors and several Florida-based reports on nursing will become available as the Health Initiatives Committee moves into its strategic planning and implementation year. The Florida Center for Nursing, in conjunction with health industry leaders, will evaluate the current and future needs in nursing and is expected to produce a report in early 2016. Several of the critical contextual factors that should be considered for a thorough analysis include: shortages that may currently exist but are not captured in the baseline data of the DEO's projections, increasing demand for nurses with a bachelor's degree due to more complex care and hospitals seeking Magnet status, nuanced demand where some positions require advanced training and are not actually available to new nursing graduates, changes in health care delivery that impact the demand for registered nurses and advanced practice nurses, and factors that impact the growth of nursing programs and education pathways for nursing.
- The data provided in the tables below are current estimates of supply and demand, but further data collection and analysis is required to determine the true estimate of gaps in the nursing workforce. The Health Initiatives Committee will continue to review the nursing occupations as part of its work in 2015-2016.
- P. 19-29, Nursing chapter, text describing each of the tables and sources for data in the tables have been added
- P. 19, Table 1A for Nursing has been modified in the following ways:

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- The "Adjusted Supply" column was changed to "Adjusted Graduates*" with a corresponding notation below the table.
- "Supply-Demand" has been changed to "Adj. Graduates Demand".
- The numbers for Annual Demand, Adjusted Graduates, and Adj.
 Graduates Demand were previously summed (and merged in the table) for Registered Nurses, Nurse Practitioners, and Nurse Anesthetists. The numbers have now been separated and estimates are provided for each of the three occupations. This change is consistent with the figures included in Figure 3. Summary of Projected Annual Demand and Annual Supply by Occupation.
- P. 31, Physician chapter, Summary Observations, the 5th bullet was modified to the following sentence:
 - Additional data on Graduate Medical Education and results from a recent Florida-based supply-demand gap analysis for Physician specialties is included in this section. These additional contextual factors highlight current and projected shortage areas for Physicians, both geographically and in specialty areas.
- P. 46, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are SUFFICIENTLY SUPPLIED. However, the supply-demand gap analysis for Physical Therapists should be reviewed again in the coming years, as the impacts of an aging workforce and the shift to the doctoral level could disrupt the current balance.
- P. 52, Summary Observations, 5th bullet point and asterisk notation, the following sentences were modified:
 - Based on available data, it appears that the projected annual openings are SUFFICIENTLY SUPPLIED. In addition to a significant amount of inmigration for the occupation, the new supply of roughly 100 graduates per year from the Lake Erie College of Medicine Dental School will increase the number of Dentists in Florida and fill annual demand over the projected period.

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- ** Does not include, however, new supply of graduates from Lake Erie
 College of Medicine Dental School. (Asterisks and notation were deleted).
- P. 55, third paragraph, the following sentence was added to the end of the paragraph:
 - However, the new supply of 100 graduates per year from the Lake Erie College of Medicine Dental program could bring the annual number of newly licensed Dentists above the projected annual demand, yielding a sufficient supply of Dentists.
- P. 59, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are SUFFICIENTLY SUPPLIED. However, the supply-demand gap analysis for Occupational Therapists should be reviewed again in the coming years, as the impacts of an aging workforce and any increases in outmigration could disrupt the current balance.
- P. 100, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are **SUFFICIENTLY SUPPLIED**.
- P. 127, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are SUFFICIENTLY SUPPLIED. (Question mark was replaced with a period)
- P. 132, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are UNDER-SUPPLIED SUFFICIENTLY SUPPLIED. The adequate supply of graduates and license-holders in closely related occupations could fill any unmet demand for Marriage and Family Therapists. At the 5-digit SOC, where related occupations can be grouped together, the supply of therapists and counselors far exceeds the projected number of openings.
- P. 141, Summary Observations, 5th bullet point, the following sentence was modified:

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- Based on available data, it appears that the projected annual openings are UNDER-SUPPLIED SUFFICIENTLY SUPPLIED. The adequate supply of graduates and license-holders in closely related occupations could fill any unmet demand for Rehabilitation Counselors. At the 5-digit SOC, where related occupations can be grouped together, the supply of therapists and counselors far exceeds the projected number of openings.
- P. 147, Summary Observations, 5th bullet point, the following sentence was modified:
 - Based on available data, it appears that the projected annual openings are UNDER-SUPPLIED SUFFICIENTLY SUPPLIED. A lack of licensure data means that in-migration estimates are not available. Additional supply from in-migration and a newly proposed program in Music Therapy at Florida Gulf Coast University are likely to fill any unmet demand over the projected period.
- P. 161, a new section on Emerging and Evolving Occupations with the following paragraphs has been added:

As part of its environmental scan, the Health Initiatives Committee and Advisory Group considered 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.

One area of particular concern is personalized medicine and the need for a workforce with practice-oriented and increasingly complex biomedical knowledge and skills. Further review of programs that prepare graduates for the practice of personalized medicine, in subjects like Genetics, Pharmacogenetics, and Bioinformatics, may be warranted. Genetics and Bioinformatics may be program areas that are evolving and in the future it may be necessary to prepare more Genetic Counselors and more medical science graduates with practice-oriented skills in personalized medicine. Pharmacogenetics on the other hand may be an emerging area where student and workforce demand will grow as new technologies are developed.

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Another area of concern is preventive and population health and an increasing need for community-based health workers. Occupational Health and Safety Specialists and Environmental Health Scientists were two occupations that could not be fully evaluated for this gap analysis based on the current classification of programs. The role of Health Educators, Community Health Workers (typically not required to have a Bachelor's degree), Epidemiologists, Occupational Health and Safety Specialists, and Environmental Health Scientists may evolve to be needed in a greater number of workforce settings and demand may increase as health promotion and prevention programs expand.

• P. 161, the section on Conclusion and Next Steps has been modified to delete some text and replace it with the following paragraphs:

Nurses and Physicians are the most likely of the 21 occupational groups presented in the results section of this report to be under-supplied. Physical Therapists, Occupational Therapists, and Dentists had contextual factors that indicate they are sufficiently supplied but should be monitored for changes to supply or demand. For those occupations with Florida licensure, only Marriage and Family Therapists had fewer licenses issued in 2014 than the projected annual openings. However, considerable overlap in the counselor and therapy occupations leads to the conclusion that overall supply is sufficient to fill any unmet demand for the specific counselor and therapy occupations. Several occupations had fewer graduates in 2012-2013 than the projected number of projected openings, but licensing data suggests that in-migration may offset this gap. Enough licenses for Physical Therapists, Occupational Therapists, and Veterinarians appear to be issued each year to meet the projected annual openings, but a gap could be created if in-migration falls, if a high percentage chooses not to work (or only part-time) in the field, or if demand increases above the projections.

Nurse Practitioners and Nurse Anesthetists appear to be under-supplied when the retention of license-holders in Florida is considered. This may not be a problem of producing enough Florida graduates, since 720 pre-professional Nurse Practitioners and Nurse Anesthetists graduated in 2012-2013 and the projected annual openings for both occupations is 497. Rather, retention of graduates and license-holders may be the problem, as more than half of the 2014 licensees (388 of 688) left the state within a year of licensing. Similarly, the annual licensing for Dentists also falls short of meeting the 511 projected annual openings when considering that only 443 of the 569 licenses issued

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in 2014 currently remain in-state and active. However, in this case, **the addition of 100 new graduates a year from the Lake Erie College of Medicine Dental program should offset this shortage beginning in 2016.**

The next steps of Health Initiatives Committee will be to consider the analysis and draw conclusions on which occupations are under-supplied. Population growth and the distribution of the population (and health care needs) around the state are two trends that influence all of the occupations reviewed for this report and are additional factors to consider as the Committee moves forward. Florida's population will continue to grow. The state's demographics are not expected to stabilize or to decrease, as other states project. Instead, all projections show continued increases in population as far out as these projections are made. Florida's health care needs are not evenly distributed throughout the state. Rural areas, in particular, can be undersupplied, even as the state as a whole has sufficient supply in any given health care occupation. For these reasons, the conclusions for this gap analysis may differ at the regional level or for the adequate care of specific populations.

Based upon the report's findings and consideration of additional factors, the Board will develop a *Strategic Plan for Health Initiatives* to advance the quality, coordination, and, where appropriate, growth of educational programs, across the State University System to better position Florida to respond to future workforce needs.