

Phase 1 Report

Suncoast Workforce Board, Inc.

***Research, Analysis and Mapping of Healthcare
Education and Employment Linkages***

[Project period: February 1, 2010 – June 30, 2011]

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Submitted by



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EXECUTIVE SUMMARY

The **Phase 1 Report** addresses needs, recommendations and organizational mapping of Healthcare Education and Employment Linkages. Phases 2 and 3 address Development, Certification and Implementation of Curriculum. The desired outcome behind the project is to “ensure that individuals are provided optimal training for career paths in nursing and allied health on the Suncoast, and that healthcare employers have a qualified pool of applicants and access to skill upgrades for their employees.” To achieve this outcome, a comprehensive plan for the delivery of nursing and allied health curriculum must be in place to connect job seekers, training programs, and employers.

Organizational mapping

A description of relationships among employers, education providers, job seekers/employees, and Suncoast Workforce services appears also as an **Organizational Map**. This document, a PowerPoint presentation designed for individual browsing, is linked as a separate document and is referred to in the discussion of findings.

Categories of findings in the report

Findings are presented in the following categories: **Beginning a career in healthcare, career laddering, and skill upgrading/cross-training**, with additional discussion of skill clusters requiring special attention: **Leadership, interpersonal communication, problem solving/critical thinking/decision-making, and information technology**. Finally, there is a discussion of **current/future trends** impacting the overall healthcare system and implications for building education/training capacity within the region. This **summary** contains a review of overall findings and trends.

Summary

Working with the Bi-County Healthcare Committee, representing a cross-section of healthcare organizations, has provided a unique perspective into how these organizations meet their needs for skilled professionals, the relationships among employer, education and workforce service organizations, as well as the current environment and demands affecting the delivery of healthcare services. Several observations emerge from Phase 1 of the project, described in more detail in the full report:

1. Clearly observable benefits arise from collaboration among employers, education providers, and the Suncoast Workforce organization. During the initial phase of the current project, collaboration has resulted in completed training sessions, adoption of common strategies to meet future employment needs, and an increased awareness of best practices

- in areas such as health information technology. **Continued functioning of the Bi-County Healthcare Committee** offers great potential in assisting large and small healthcare organizations in Manatee and Sarasota counties as they develop strategies in response to significant changes in the healthcare industry. The Suncoast Workforce and Bi-County Healthcare Committee members should explore strategies for sustaining the work of the committee beyond this initial grant funding period.
2. The potential benefits of collaboration among healthcare organizations will be realized only if an accessible and responsive communication medium is established, i.e., a **Web-based portal** and resource bank available to employers, educators, and employees/students/job seekers. With the creation of such a resource, the work of the Bi-County Healthcare Committee and its planned workgroups will be immediately available to those who need the information. Currently, there is no single point of access to information or resources.
 3. The study identified several **gaps in clinical education** which are addressed in detail in the report:
 - a. **Specialty training for nurses** is available sporadically in the region. This situation causes employers to scramble to offer courses and clinical experiences as needs arise. As individuals, nurses seek training and certification from various sources, including online programs. Through the Bi-County Healthcare Committee, the resources of colleges and employers could be coordinated to advertise courses based on identified needs, and access to these programs and resources could be provided to individuals and organizations through the Website.
 - b. **Career laddering** and **skill upgrading** offer clear benefits to employers as well as to employees. As with nursing specialty training, programs offered by career-technical schools, colleges and employers are not presented through a central communication source, and there is little coordination of resources, instructors, or funding opportunities. Employers have common needs in these areas, which could be more efficiently addressed through regional collaboration and delivery.
 - c. There are **no local education programs** for ARNP, Physician Assistant, or the Physical Therapy doctorate. Such programs are offered at universities in Tampa (USF/South University), Ft. Myers (FGCU/Nova Southeastern), Orlando (UCF) and at more distant locations. The Florida State University has initiated a small Doctorate in Nursing Practice (DNP) program in Sarasota-Manatee, with plans for a MSN program in 2011. We recommend further

study as to how responsive these **out-of-region universities** are to the needs of local employers (who will continue to employ a significant number of professionals with such credentials), including an examination of internship/clinical experience relationships with these schools.

4. The study identified **gaps in the skill cluster of leadership, interpersonal communication, and teaming skills**. In discussions and data collection with employers, a clear image emerged of the importance of leadership, interpersonal communication, and information systems in the functioning of all kinds of healthcare organizations. Evident as well were the important roles of critical thinking, problem solving, and **evidence-based practice** – all within a **team environment**. Employers discussed the need for training and education in these areas, based on observed gaps in performance of new hires as well as veteran employees, especially in Allied Health (assistant and technician level) positions.

For most skill sets in this cluster, we recommend addressing potential gaps in each of the following components of a system:

- a. Incorporate **assessments** in admission procedures for training or degree program and/or during **selection for hiring/** promotion
 - b. Insure appropriate emphasis in post-secondary **educational/training curricula**, including effective instructional practices of modeling, practice and feedback, utilizing simulations/ scenarios, case study, role play, etc.
 - c. Insure that **clinical experiences** and **orientation** programs for all occupational areas include consistent expectations, observation, feedback and evaluation, with appropriate emphasis on this skill cluster, as integrated with the activities to clinical skills
 - d. Develop expectations, training and tools (e.g., a checklist) for **supervisors/team leaders/ department heads** to assist in their role to reinforce and evaluate skills in communication and teamwork.
 - e. Continue to support **Employed Worker (inservice) training** in targeted areas from this skill cluster. Courses in this skill cluster need to be documented and catalogued through a **Web-based clearinghouse**, insuring consistency, availability and accessibility to member organizations.
5. All types of healthcare services and facilities are implementing **increasing levels of technology**, from new computerized medical devices to electronic medical records (EMR/EHR) and remote monitoring/communication methods. Across the region, there are varying

levels of implementation of technology, from very low levels to systems implemented in organizations which are well along with communication and record keeping supporting clinical decision-making.

Employers are at various stages in examining and planning for the conversion to EHR/EMR. There are many benefits to be gained from a **mutual sharing and awareness of implementation and training plans**. The Bi-County Health Care Committee should receive updates on this initiative, including more active sharing of organizational strategies and solutions, which may lead to cooperative ventures in this area.

6. With the structure of the nation's healthcare changing, **new models** of both primary care and post-acute care will necessitate innovative ways of doing business, closer coordination of care plans among various levels of care, bundling and coordinating of services. These new directions will have profound **implications for preservice and inservice training**. The skill sets required to function in these new environments are conceptually clear, but developing the strategies required for navigating the change between current practice and training and that of the future will be challenging. Success in all of the above areas will require a focus on current best practices, *combined with* the knowledge of **emerging models of clinical and business practice**.

The Bi-County Healthcare Committee has explored a number of ways to increase training and education capacity in the region, based on identified gaps. Most of these needs can be addressed through continued collaboration, but additional resources must be explored as well. The Workforce Funders Collaborative and Suncoast Workforce will continue to offer support, along with seeking additional resources. Additional changes impacting healthcare on a national scale add to the complexity of closing currently identified gaps, but there are additional benefits to be gained from adopting a future as well as systems perspective in identifying solutions. For example, many of the efficiencies gained through necessity during the recent economic downturn have resulted in permanent restructuring of roles and responsibilities. As collaborators continue to build training capacity in the region, they will be working toward the overarching goal of improving efficiency and meeting higher standards of patient care. These overarching goals will be achieved by raising skill levels for all staff, beginning with technical/clinical skills. To realize the full benefit of skill upgrading, curriculum developers must include a complementary emphasis on interpersonal communication, leadership, teaming/case management, and critical thinking in an evidence-based environment.

Project Overview:
Suncoast Workforce Board, Inc.
for Research, Analysis and Mapping of Healthcare
Education and Employment Linkages, and Development,
Certification and Implementation of Curriculum

INTRODUCTION

The **Performance Design Group** is pleased to submit a **Phase 1 Report** to the Suncoast Workforce Board, Inc. for **Research, Analysis and Mapping of Healthcare Education and Employment Linkages and Development, Certification and Implementation of Curriculum**. George Reid, Ph.D., Sanders Bell, Ed.S, and Teresa Carafelli, RN were involved in data collection and development of findings and recommendations from Phase 1. The Bi-County Healthcare committee provided input to developing interim reports at monthly meetings as well as interim workgroup sessions.

This overall project addresses a scope of work encompassing three phases. **Phase I** builds the foundation for subsequent work with a needs assessment that includes research, analysis and mapping of needs and resources in the region. **Phase II** includes the design and development of interventions to address high priority gaps identified in the needs assessment, including curriculum development and the critical step of coordinating approval/credentialing (certification) of any new or redesigned curricular programs, as required. **In Phase III**, consultants will work with the Bi-County Healthcare Committee to implement and field-test the new or redesigned curriculum, including formative evaluation and specification of needed revisions.

Project Goals

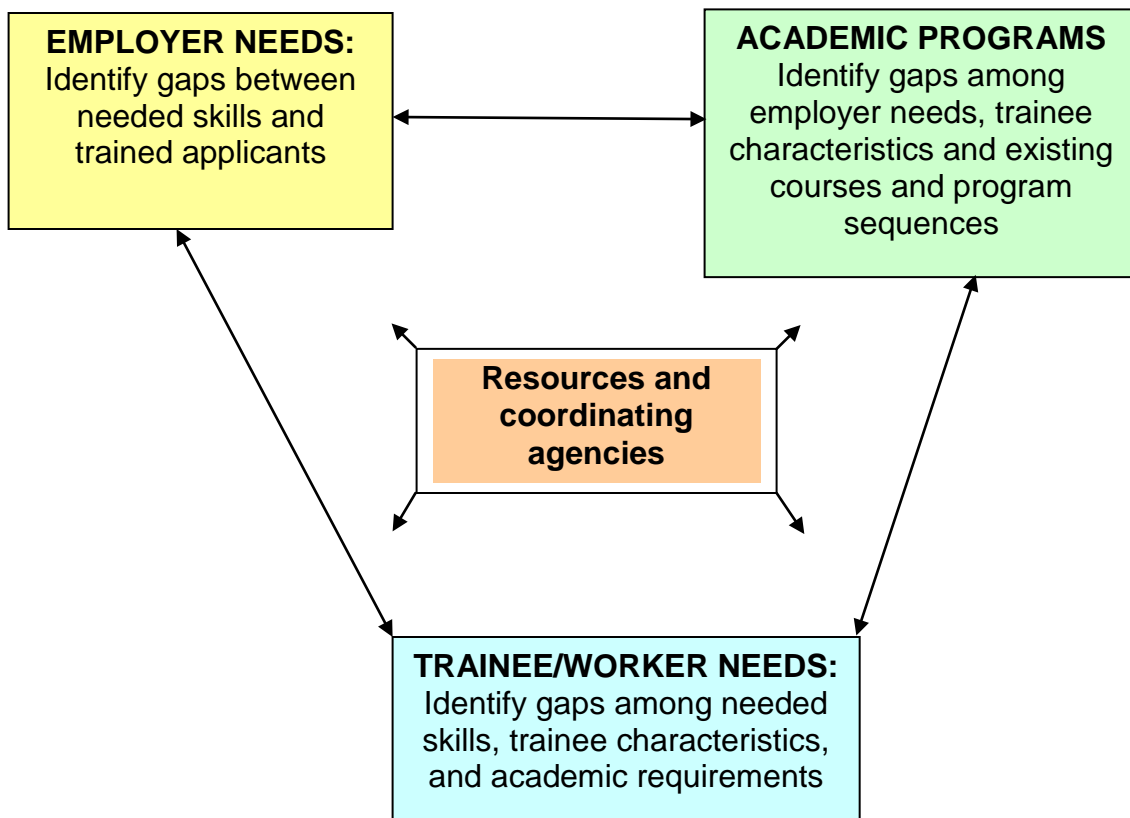
The desired outcome behind the project is to “ensure that individuals are provided optimal training for career paths in nursing and allied health on the Suncoast, and that healthcare employers have a qualified pool of applicants and access to skill upgrades for its employees.” (RFP 2009-4) To achieve this outcome, a comprehensive plan for the delivery of nursing and allied health curriculum must be in place to connect job seekers, training programs, and employers. The current project represents the first steps in the direction of developing such a plan.

The need for increased training capacity is clear. The goal of the overall project will be to insure that this increased capacity:

1. Clearly targets the needs of employers and involves employers in its design and delivery,
2. directly addresses the needs and characteristics of several types of potential workers: displaced/unemployed workers, new entrants to the labor force, and incumbent or unemployed workers needing skills upgrades; and,
3. is developed in cooperation with existing education/training organizations in the region through an analysis and design of new or restructured curriculum to address employer and trainee needs and streamline the delivery of employer defined training.

The needs assessment process began with organizational mapping as the foundation, allowing PDG consultants to identify existing gaps in each of the three areas above, which will be refined over the course of the project. This mapping and assessment will serve as the guidepost for development of a coordinated, curriculum-based response to meet identified needs. **Figure 1** below depicts relationships among these three entities.

Figure 1. Coordinated system to improve training capacity



Phase 1 Report

This report covers findings, conclusions and recommendations based on an analysis of available data. These results were further examined and refined through collaboration with SWB staff and Bi-County Healthcare Committee Workgroups. These are initial impressions from the data, and therefore represent a work in progress. It is expected that these findings and recommendations will change, some significantly, over the next 5-10 years as economic and legislative factors, as well as newly developed technologies impact regional and national healthcare practices.

Generalizations from these initial findings are limited by the availability of data, data collection methods and the accessibility of employers during February – May, 2010.

Methods/data sources:

- On-site interviews with a cross section of 25 employer and 19 education organizations (**Appendices 1 and 2**)
- Individual and group interviews with employees, recent graduates, and students (Interview Guides: **Appendix 3**)
- Documents/reports from employers and education organizations
- Education and employer workgroup focus interviews
- **Web survey** results from 11 employer organizations
- Needs assessment data sheets from 13 employers
- Various reports and data from the state and federal government, private organizations, and various professional associations
- Analysis of employment and position announcements and summary reports
- Articles and newsletters from medical/healthcare organizations & journals

FINDINGS and RECOMMENDATIONS

The majority of the findings were generated from contacts with employers, in addition to contacts with all major education institutions and a sample of job seekers. Sampling included the largest regional employers along with a cross section of other organizations employing various specialists (e.g., physical therapy, mental health). Sampling and data collection were guided by the regional Targeted Occupations list. Specifically excluded was direct inquiry into dentistry, podiatry, vision-related professions, chiropractics, alternative medicine, massage therapy and veterinary medicine. Physicians as a profession were not included in examining training capacity, although the study did examine factors impacting physician training and practice.

Throughout data collection with all stakeholders, inquiry was guided by a systems model, as represented by Figure 1. The model depicts the human resource/education/training relationships among three stakeholder groups within the larger system of healthcare delivery. Job seekers, students, new graduates, job applicants, and employees seeking new skills were followed as they navigated the various services and resources available to them. Education and training programs were catalogued as to entrance requirements, curricula, clinical experiences, and observed their methods of responding to employer needs and emerging technologies present in the work environment. Finally, employer needs were reviewed with respect to projected openings in various fields as well as the types of skills, certifications and specialties required to meet current and future demands. In addition, we asked employers about particular skills or attitudes needing more emphasis, based on experience with recent hires or current employees; inquiries also examined emerging trends in clinical practice, healthcare policy changes, and technology and the likely impact on skills and specialties.

Organizational mapping

A description of detailed relationships among employers, education providers, job seekers/employees, and Suncoast Workforce services appears also as an **Organizational Map**. This document, a PowerPoint presentation is linked as a separate document and will be referred to in the discussion of findings.

Categories of findings

Findings are presented in the following categories: **Beginning a career in healthcare, career laddering, and skill upgrading/cross-training**, with additional discussion of skill clusters requiring special attention: **Leadership, interpersonal communication, problem solving/critical thinking/decision-making, and information technology**. Finally, there is a discussion of **current/future trends** impacting the overall healthcare system and implications for building education/training capacity within the region.

Beginning a career in healthcare

Many Manatee and Sarasota county high schools have healthcare focused learning communities or academies that prepare students for post-secondary education or immediate employment in the healthcare profession. In addition, students receive counseling/advising and information on local training opportunities available at career-technical schools or colleges. To assist adult or youth job seekers who are unemployed or are looking for a career change or advancement, Suncoast Workforce (SW) centers offer counseling, assessment, and financial support through Workforce Investment Act (WIA) programs. We interviewed a number of students or recent graduates who had received

assistance from SW/WIA, leading to a degree and/or certification in the healthcare field (e.g., CNA, CMA, LPN, RN). Many of those interviewed had been laid off in fields such as construction or sales, and many had a latent interest in healthcare which offered a viable career alternative. These clients stated that they could not have afforded or managed pursuing additional education without SW/WIA assistance.

Profile of the first 41 of 75 **WIA customers**: Median age **40**, **80%** female, **50%** with high school diploma or GED/**50%** with 1 to 4 years of postsecondary education, **80%** unemployed, and **90%** white. Their median **TABE** scores in math, reading and language were all at **12.9**, and all scored at *acceptable levels* for attitude and career interest in healthcare. **Profile of high school students**: Students typically enroll in academies in grades 9 or 10 after expressing an interest in the medical/ healthcare field. Students may have aptitudes or interest in 2 or 4 year college programs or may initially focus on career-technical certificate programs. Some high schools offer approved courses in healthcare basics and/or medical terminology, allowing students to be hired as healthcare aides or assistants immediately upon graduation. Many programs include internship experiences in local hospitals, physician offices or long-term care facilities

Recommendations: Support strategies should include a consideration of high school medical/healthcare academies, designed to strengthen articulation between high schools and career-technical schools and colleges. A dedicated **Website** describing and linking career services and opportunities in healthcare should cover high school through college training programs. Suncoast Workforce should continue to support WIA clients, adult and youth, in receiving additional training for career advancement in healthcare.

Career laddering

Career ladders, representing progressive levels in skills and/or responsibilities, comprise three primary paths: technical, patient care, and administrative – with some overlap in responsibilities and job titles across the paths (see **Career Ladder document** from MSWFC). Formal education is usually required to advance upward on a ladder, but many in-house, vendor training and self-study routes to attaining skills and certifications exist as well. Career laddering provides likely the greatest benefit to an employee in seeking to improve wages, working conditions and future advancement in a sector of healthcare. The Suncoast Workforce as well as the Workforce Funders Collaborative have supported in-house training for employed workers and have provided educational support for individuals seeking additional certifications or degree advancement (for example, training health information managers to become Cancer Registrars, or supporting LPNs to complete an associates degree (RN) education program).

Recommendations: Support for career advancement, either to individuals or through employer organizations should be linked to projected needs/openings in employer organizations. The current study, as well as other data/reports provides some foundation for **strategic positioning of support**, and the Bi-County Healthcare Committee should continue to assess needs as a basis for program planning in the future. Several excellent examples of support for career laddering are being implemented at this time (e.g., Cancer Registrar certification, LPN to RN transition). These experiences should be documented from initiation to completion as a model for establishing effective practices in offering such programs. Next to the strategic positioning of course offerings based on need, developing an awareness of such opportunities on the part of employees and employers is much needed. A **Website** (as mentioned in the previous section) seems to be the most cost effective method for reaching all parties, including providing registration/contact information.

Specific need areas for educational support evident from our data as well as the Bi-County Healthcare needs assessments follow:

- **LPN to RN.** Education providers should examine the schedule accessibility of LPN to RN education programs. This area of career advancement is an obvious pathway which will serve employee as well as organizational needs; some employers indicate that working LPNs cannot adapt to currently available schedules of courses for such programs.
- **CNA to CMA** or Medical Technology
- **CMA and Medical Technology to LPN, RN,** and other certificate/associate level training
- **RN to BSN;** BSN to MSN; MSN to ARNP/Doctorate. Employers provided sound rationale for each type of advancement: The desirability of BSN trained nurses; creating a career path leading to nursing supervision, department heads, and nurse educators, which includes an expectation of at least the BSN degree and more commonly a MSN; the demand for nurse practitioners, requiring an ARNP or doctorate (e.g., Doctor of Nursing Practice).
- **Physical Therapist (BS or MS) to Doctorate.** The trend in physical therapy is toward doctoral level training for Physical Therapists (PT), with a mandate of having a doctorate by the year 2020 (driven by federal reimbursement programs, which currently prescribe therapy requirements for PT assistants (PTA)).
- Education programs for the **Physician Assistant** (MS or PhD)

Local education programs exist for most of the above education needs through the Bachelor's level (e.g., BSN program at State College of Florida and Keiser University). MSN, ARNP, Nursing Doctorate, Physician Assistant, and Physical Therapy doctorate programs are offered at universities in Tampa (USF/South University), Ft. Myers (FGCU/Nova Southeastern), Orlando (UCF) and at more distant locations. We recommend further study as to how responsive these **out-**

of-region universities are to the needs of local employers (who clearly do and will employ a significant number of professionals with such credentials, including an examination of internship/clinical experience relationships with these schools).

Post-secondary/employer partnerships and articulation

The Web survey indicated that 70% of employers agreed that they had numerous links with local post-secondary training institutions through advisory committees, needs assessments, clinical experiences, etc. This extent of communication provides a mutual benefit in keeping curricula up-to-date, meeting student/employee and employer needs. A regional Nursing Consortium, hosted by SCF, provides a forum for educators and employers for collaboration on curriculum, professional trends, and planning clinical experiences. The strength of these relationships argues for building stronger ties with other institutions, especially those offering programs not available in the local region.

Skill upgrading and cross-training

Several factors have combined to create an environment in many if not all institutions calling for an **upgrading of skills** for a number of positions, including nursing assistants, medical assistants, medical technology, information and business functions, and nursing. Driving the demand for skill upgrading and cross-training are factors such as new technology, moves to improve efficiency, certification and regulatory requirements, and a universal trend in all organizations toward positions that require judgment and problem solving, along with skills in collaboration and information management. In addition to changes common to many organizations, there are specific demands in healthcare, including:

- **CNA/PCA/CMA/LPN:** In addition to customer service/patient interface skills, additional specialized training was cited as a need for nursing assistants, patient care assistants, medical assistants, and licensed practical nurses. The following areas for skill upgrading or adding certifications were cited by employers
 - CNA: Certified Hospice and Palliative Nurse Assistant (**CHPNA**), **CNA Certificate**
 - LPN: Certified Hospice and Palliative Licensed Nurse (**CHPLN**), Gerontology, Medical Coding & Billing
- **PT/OT/PTA/OTA/Speech-Language Therapist:** Lee Silverman Voice Treatment Training and Certification (**LVST®**)
- **Respiratory Therapist:** Advanced Ventilator Training
- **Health Information Technology/Coding:** Coding/HIM Certification; Certified Tumor Registrar (**CTR®**)

- **Pharmacy Technician:** Additional training in billing/insurance procedures

- **Registered nurses (RN):** Organizations hiring new nursing graduates (RN or graduate nurses (GN) quickly move these nurses into training for specialty areas, by enrolling them in certified specialty courses or engaging GNs in institution developed clinical programs related to service needs. Employers described the need for specialty certified nurses in several fields. Larger hospitals engage newly hired or veteran nurses in training or clinical experiences with nurse educators or preceptors as needed, and these training experiences are usually managed by individual departments (e.g., emergency medicine, neonatal care, Perioperative, ICU). Similar processes occur in large physician practices, specialty practices, and ambulatory surgery centers. Currently, local education institutions (e.g., SCF, USF-Sarasota-Manatee, Keiser) are not involved in specialty education programs, but are exploring offering at least the Perioperative Nursing specialty (SCF); specialty certifications typically are not administered by colleges, apparently, due to experience requirements. Specialty education and certification are not offered as an extension of LPN, RN, or BSN education degree programs. The following areas were cited by employers as priority needs in nursing, primarily [**specialty(certification)**]:
 - Perioperative nursing (**CNOR**)
 - Medical-Surgical nursing (**RN-BC, CMSRN**)
 - Sexual Assault Nurse Examiner (**SANE**)
 - Critical Care (**CCRN**) – adult, neonatal, and/or pediatric
 - Progressive Care/Telemetry (**PCCN**)
 - Oncology (**OCN**)
 - Certified Hospice and Palliative Care (**CHPN**)
 - Emergency/trauma (**TNCC or CEN**)
 - Infusion nursing (**CRNI**)
 - Wound, Ostomy and Continence (**CWOCN, CWON, CWCN**)
 - Lee Silverman Voice Treatment Training and Certification (**LVST®**)
 - Diabetes Educator (**CDE**) – available for PT, OT, pharmacists also
 - Rehabilitation nursing (**CRRN**)

Recommendations: The specialty certification priorities listed above are based on current needs and the limited sampling of employers in the study. Therefore, these priorities will change over time and a number of specialty training needs likely are missing from the list. It is recommended that the Bi-County Healthcare Committee **enlarge the membership base** and involve additional employers, including specialty physician groups and treatment centers, surgery centers, home health care, and imaging centers, in order to increase the quantity and diversity of needs assessment respondent covering Employed Worker Training Needs as well as Projected Openings by occupation/certification. Further **recommendations** include:

- Develop a **Web-based clearinghouse** of available certified educators and course offerings in various specialty fields for nursing and other occupations among Bi-County Healthcare Committee members. This is especially important for smaller employers who may not have certified educators or for any employer with a small group of employees needing training who could be combined for a more cost efficient and meaningful learning experience.
- Facilitate the **development and documentation of course packages** in selected areas which would make such courses available, with accessible resources and a standardized curriculum for adoption/adaptation by member organizations (see Curriculum Development section to follow)
- Examine the **role of regional education institutions** in (1) informing new and graduating students, and alumni of opportunities and (2) participating in the development and delivery of specialty training courses in cooperation with clinical facilities and employers.

Skill Cluster: Leadership, interpersonal communication, critical thinking/problem solving/teaming – implications for preservice and inservice education

While the previous sections address factors within the human resource and training/educational sub-system, the remaining sections address these factors within the larger system of healthcare delivery. In discussions and data collection with employers, we were able to develop a picture of the importance of leadership, interpersonal communication, and information systems in the functioning of all kinds of healthcare organizations. We also realized the important roles of critical thinking, problem solving, and **evidence-based practice** – all within a **team environment**. Employers discussed the need for training and education in these areas – based on observed gaps in performance of new hires as well as veteran employees, especially in Allied Health (assistant and technician level) positions. The need for additional (or sometimes initial) skills in these areas may be attributable to several factors: lack of training, lack of experience or clinical orientation, increased business, technology and clinical demands, inconsistent supervision, generational differences, and/or cultural differences. Employer needs in many of these areas were listed as requests for Employed Worker Training, but additional strategies must be included in the design of long-term solutions.

Overall Recommendations: For most skill sets in this cluster, we recommend addressing potential gaps in each of the following components of a system:

- **Assessment**, via Behavioral Event Interview, instruments, observations, references, etc. – incorporate in admission procedures for training or degree program and/or during **selection for hiring/** promotion

- Insure appropriate emphasis in post-secondary **educational/training curricula**, including effective instructional practices of modeling, practice and feedback, utilizing simulations/ scenarios, case study, role play, etc.
- Insure that **clinical experiences** and **orientation** programs for all occupational areas (e.g., CNA, CMA, LPN, RN/BSN, PTA, OTA, Medical/Surgical Technology, Pharm. Tech, Billing/Coding, Health Information Tech) include consistent expectations, observation, feedback and evaluation, with appropriate emphasis on this skill cluster, as integrated with the activities to clinical skills
- Develop expectations and training for **supervisors/team leaders/department heads** to assist in their role to reinforce and evaluate skills in communication and teamwork, including more advanced skills in critical thinking, problem solving, and data-based decision making (evidence-based practice)
- Continue to support **Employed Worker (inservice) Training** in targeted areas from this skill cluster. Several examples of successful courses have been offered (e.g., Leadership through SCF Corporate and Community Services). Training for current employees will always be a critical component in the overall pursuit of excellence in quality and outcomes, assisting employees in increasing personal and team effectiveness, as well as supporting advancement and promotion. As discussed under Career Laddering and Skill Upgrading, courses in this skill cluster need to be documented and catalogued through a **Web-based clearinghouse**, insuring consistency, availability and accessibility to member organizations.

SKILL SET: Leadership/Management/Supervision

Most organizations (acute care, physician practices, long-term care, and rehabilitation) expressed the need for **leadership training**. The impact of skill training in leadership is well documented. Many organizations offer courses to staff, leadership development programs are initiated, succession plans exist in some organizations, and many staff members enroll in graduate programs in management to support career advancement objectives. Based on interviews with HR staff as well as clinical supervisors, this area continues to present itself as a need; additional changes in organizational structures, demands on service delivery, as well as legislated/regulatory changes sharpen the need for training in management and supervision in all areas of practice, including clinical, business services, and support.

- **Training implications:** A survey of participants in the current study finds numerous cases of professionals with clinical/technical skills being called upon to exercise leadership in various situations, often leading to formal

leadership positions. These participants found themselves in these situations or positions, often, without much preparation. One institution with a leadership development program indicated that about 1/3 of participants were promoted into leadership positions after a year or two in the program. What was learned from these instances is that organizations “cannot get enough” leadership training – such programs are a magnet for professionals who may aspire to formal leadership positions, or for staff who find themselves in *ad hoc* leadership roles.

Recommendations:

- Continue to support high quality leadership training for employed workers. Document and catalogue these courses through a **Web-based clearinghouse**, insuring consistency, availability and accessibility to member organizations.
- Curriculum development strategies for this area will be discussed further under the forthcoming Curriculum Development section.

SKILL SET: Critical Thinking, Problem Solving and Data-based Decision Making

Employers did not directly mention critical thinking, problem solving or data-based decision-making (or evidence-based practice) as an area of need for training or hiring. However, these skills were implicated throughout our discussions of current work demands as well as future trends. This skill set (along with the next – interpersonal skills) also is a critical component of the leadership/management skill set. We see this skill set becoming more and more important in the future in all healthcare organizations, driven by finances and reimbursement policies and by usage requirements for information technology (e.g., the “meaningful use” requirement for electronic medical records), in addition to current emphases on quality and patient outcomes. The basic focus of new rules proposed by the Centers for Medicare and Medicaid Services and the Office of the National Coordinator for Health Information Technology mirror many of the best practices that health care professionals aspire to achieve as they plan the treatment and care of patients: Evidence-based practice, team-based decision making, and patient-centered care. Hospitals and other healthcare providers are also highly focused on **cost efficiency**, driven by reimbursement policies, but are also responding to recent economic conditions in the region and country.

Recommendations: This skill set was well represented in college and career-technical curricula for education programs from CNA and CMA, Medical Technology, to RN/BSN education. This foundation in training should be reinforced in all aspects of HR and training: Selection, inservice training, clinical experiences, plus incorporation into the design of Employed Worker training in all areas. Course designs addressing “soft skills” as well as clinical education should incorporate leadership/critical thinking/evidence-based decisions and teaming into the learning context, continually reinforcing these process skills as

defining the environment for clinical practice. More on this recommendation will be addressed under Curriculum Development.

<SKILL SET: Interpersonal communication, teaming, and professionalism>

There is a widespread recognition of a lack of **patient/customer interface skills** on the part of healthcare support staff (office staff, technologists, nursing assistants). This observation was recorded from the survey as well as interviews with essentially every type of employer. A catch-all term for this area would be “attitude,” but further analysis reveals a combination of knowledge, skills and attitudes (KSAs) – all of which are responsive to training. For nursing assistants (aides, orderlies, attendants) in particular, this area needs to be addressed because of the disproportionate amount of patient interaction involving the nurse assistant. Inadequate communication, a perceived lack of empathy, not responding to a patient’s needs, not understanding cultural differences, etc., can have a huge impact on the overall patient experience and affect the quality and effectiveness of clinical care.

- **Training implications:** Examine curriculum and certification requirements for CNA/PCA to determine appropriate insertion point for these KSAs, which may involve pre-service, inservice, or clinical experience phases of training. CNAs/PCAs can operate as “helpers” in the clinical setting, with great inconsistency in levels of skills and attitudes with patients – or, they can function as a vital link between nurses and other clinical staff in carrying out critical procedures, communicating with the patient, problem solving, and decision-making. We have no data to indicate that possessing the desirable skills and attitudes is associated with completing a recognized training program and becoming certified; however, certification is listed as a goal/need by several employers.

Recommendations: A review of state approved curricula and interviews with student groups confirmed that a foundation of KSAs is established in training programs, although more emphasis and learning strategies may be required. We recommend further analysis and development of strategies as outlined in **Overall Recommendations** for this section, including an examination selection/hiring tools, inservice training, and evaluation protocols for clinical experience as well as employee supervision. Specific products are recommended for Curriculum Development, outlined in that section.

**Skill Cluster: Information technology, medical technology,
electronic health/medical records**

All types of healthcare services and all healthcare facilities are implementing **increasing levels of technology**, from new computerized medical devices to electronic medical records and remote monitoring/communication methods. Across the region, there are varying levels of implementation of technology, from very low levels to systems implemented in organizations which are well along with communication and record keeping supporting clinical decision-making. Financial incentives from the Center for Medicaid and Medicare Services (CMS) will essentially require hospitals, other diagnostic/treatment centers and many physician offices to implement electronic health records--EHR (or electronic medical record--EMR) by 2014. Recently approved funding assistance by the American Recovery and Reinvestment Act of 2009 creates regional assistance centers and may support additional jobs in the technology (health IT), affecting nurses, pharmacy tech, IT technicians and trainers.

Affecting hospitals primarily, billing/business offices, managers and supervisors, as well as many nursing positions will need training in converting from **ICD-9 to ICD-10** procedures/requirements (mandated by October 1, 2013). Again, employers are at various stages in examining and planning for the conversion to ICD-10 and related billing changes, and there are clear benefits from sharing implementation and training plans through the Bi-County Healthcare Committee. Training challenges seem to affect current employees most, but new hires at several levels will need to understand the new system, especially in the hospital setting where **ICD-10-PCS** is required (more so than ICD-10-CM which is used more by physician offices).

- **Training implications:** Technology changes impact all positions and planning should be underway to incorporate this area into pre-service as well as inservice training, with special consideration for persons in management and supervisory positions. Changes in procedural coding (ICD-10) will impact other areas of support, business and billing offices. The professional association AORN sees conversions to EMR as an opportunity to standardize documentation and practice in the Perioperative setting, but also offers an opportunity to strengthen evidence-based improvements in practice.

Recommendations: (1) Changes in technology and information systems will continue to increase, so Suncoast Workforce/Bi-County Healthcare Committee should continue to define and act on this need with education institutions as well as employed worker training. (2) Employers are at various stages in examining and planning for the conversion to EHR/EMR. It seems there is great potential

from a **mutual sharing and awareness of implementation and training plans** – at least at a planning level. The specific roles of local HIT consortia or education institutions have not been clarified at this time, except for mention of “training and implementation assistance” in policy documents. The Bi-County Healthcare Committee should receive updates on this initiative. **(3)** Suncoast Workforce has supported electronic medical records (EMR) training at one long-term care facility. Examples of such training should be documented along with other models of training and implementation of EMR for the benefit of all Bi-County Healthcare members.

Future Trends

- 1. New models of primary care** are being discussed and developed and this trend is being impacted by Health Care Reform legislation. Employers indicate that they are discussing new ways of doing business, which may impact training, role definitions, as well as staffing from physicians to nurses to office staff, including coordination with hospitals and long-term care centers.
Example of change: Triaging of services via telephone and/or phone or Web-based consultation prior to or in place of office visits.

- 2. New models of post-acute care** (bundling of services) are being developed. Hospitals are beginning to explore new models of bundling and coordinating services for patients (Medicare driven at this time) which require decisions on optimum levels of care and a coordination of services beginning with the hospital staff. This requires a new level of skills and interaction among various professionals, including case management and utilization of software which supports planning and billing of services.

- 3. Emerging models of healthcare delivery** imply the need for new staffing patterns and interaction among professionals. In several professional specialties there are no **local training programs** – yet regional demand is high and may increase according to future projections. We need to further identify/confirm these areas and look at the feasibility/desirability of establishing local training programs or a closer relationship with external education institutions which serve the region:
 - Physical therapy and occupational therapy (PT at the doctoral level)
 - Physician assistants (MS or PhD)
 - Nursing administration and education (BSN, MSN*, doctorate)
 - Nurse practitioners (ARNP or DNP*)
 - Speech-language therapy (Speech-Language Pathologists)

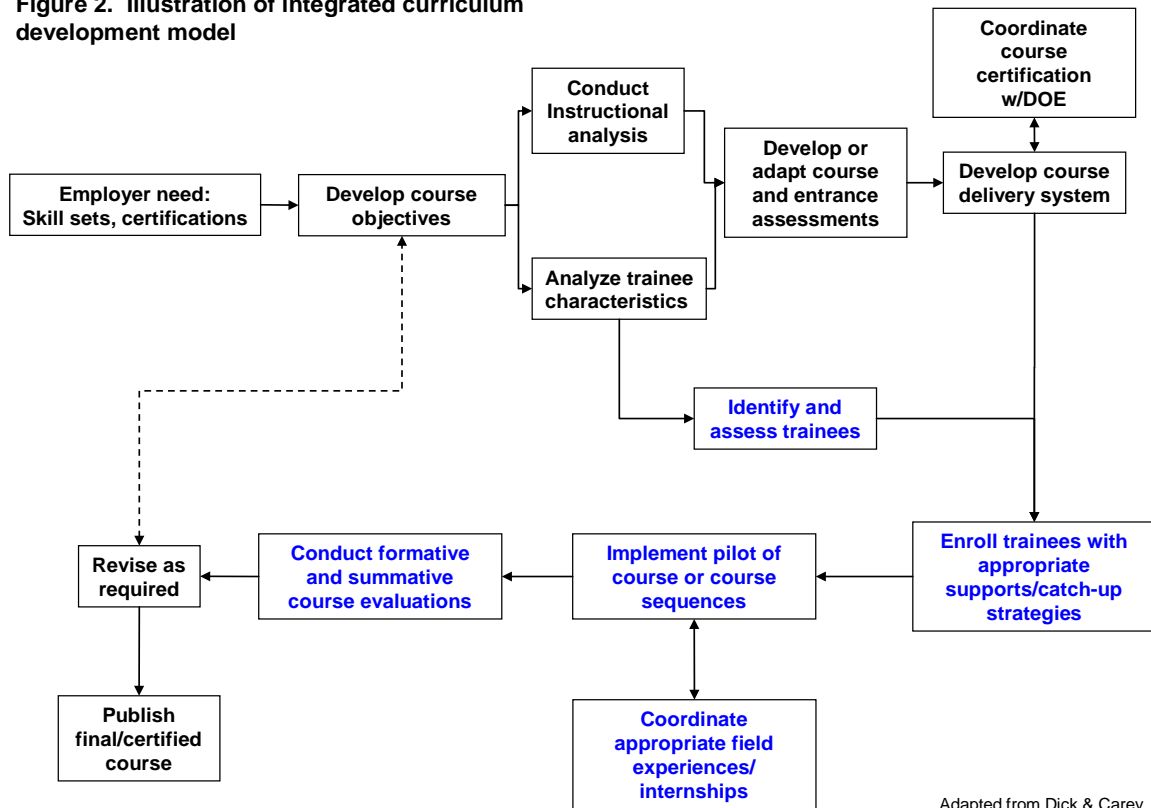
* Local programs have been initiated recently by Florida State University for the DNP, with MSN planned for 2011.

Plans for Curriculum Development: Phase 2

We have extracted the following areas for development based on the recommendations above. These are preliminary strategies to be detailed as the first step in Phase 2 (**June – December 2010**), with implementation (Phase 3) scheduled no later than January 2011.

All development will be guided by the following model, with components implemented as needed:

Figure 2. Illustration of integrated curriculum development model



Adapted from Dick & Carey

Proposed areas for development:

1. **Perioperative nurse course:** Develop course options in blended format for regional availability. Incorporate existing delivery models and experiences from local employers, involving nurse educators from employer organizations and State College of Florida, Keiser University and/or University of South Florida. Instructional design and content, as well as clinical experiences consistent with AORN standards and preparation for CNOR certification examination.
Target audience: RN

2. **Professionalism/communications curriculum:** Develop integrated package of instructional modules, selection/assessment tools and clinical experience/ supervision protocols.
 - a. Assemble development team from employer organizations
 - b. Research or develop interview protocols and/or assessments for employers which are customizable for organization
 - c. Examine existing curricula in K-12 and tech schools; interview recent grads
 - d. Review protocols and evaluation rubrics; collaborate with supervisors/mentors**Target audiences:** CNA/PCA/HHA, CMA, Health Information/Medical Records

3. **Leadership/Supervision curriculum:** Develop integrated package applicable to (1) educational preparation programs and (2) employed worker training. Develop components as needed from analysis: instructional modules, selection/assessment tools, clinical experience/supervision protocols, existing internal and external courses (e.g., SCF/CCS), and internal succession planning strategies.
Target audiences: All levels and departments

**Appendix 1: Employer and Support Organizations Providing
Information for Phase 1**

Ad-VANCE Talent Solutions
Bayside Center for Behavioral Health (SMH)
Blake Medical Center (HCA)
Doctors' Hospital of Sarasota (HCA)
Englewood Community Hospital
Express Employment Professionals
Eye Center, Inc.
FCCI Insurance Group
Freedom Village/Brookdale Senior Living
Gulf Coast Community Foundation of Venice
Intercoastal Medical Group
Jewish Family Services
Manatee Chamber of Commerce
Manatee County Health Department
Manatee County Rural Health Services
Manatee Economic Development Council
Manatee Glens
Manatee Memorial Hospital & Lakewood Ranch Medical Center
Manatee-Sarasota Workforce Funders' Collaborative
Pines of Sarasota
Pinnacle Medical Group
Sarasota County Health Department
Sarasota Memorial Hospital
Senior Friendship Centers
SMH Nursing & Rehabilitation Center
SunCoast RHIO & Health Information Exchange
TechHouse I.T. Staffing Solutions
The Zenith Insurance Company
Tidewell Hospice and Palliative Care
Vanguard Advanced Pharmacy Systems
Venice Regional Medical Center
Village On The Isle

Appendix 2: Education Institutions

Regional approved training providers:

Career Institute of Florida
Central Florida Institute
Charlotte Technical Center
Keiser University
Manatee Technical Institute
Med-Life Institute*
Meridian Career Institute
Sarasota County Technical Institute
Southwest Florida College
State College of Florida
LECOM (Lake Erie College of Medicine – Bradenton)
University of South Florida - Sarasota

* Did not participate in study

Additional training providers:

University of South Florida – Tampa
Florida Gulf Coast University
St. Petersburg College
Hillsborough Community College
Edison College
University of Central Florida
University of Florida
South University – Tampa
Nova Southeastern University – Ft. Myers

Appendix 3: Interview Guides/Protocols

EMPLOYERS

1. Has your business instituted any changes in hiring trends/patterns for specific positions? (for example: outsourcing, part-time positions only, employee leasing) What positions are most affected by these practices?
2. How do you address ongoing training needs? Does training include skill upgrades allowing employees to move to higher positions?
3. With respect to new employees, have you identified areas of performance (skills, knowledge, attitudes) that are lacking and require further training? If so, what are these areas? Please be specific by position?
4. Are there specific areas of training that you think need to be addressed by training institutions? [new programs, new courses, revised courses, revised instructional methods] If so, please list these areas.
5. In what ways do you communicate and cooperate with local training institutions to assure the quantity and quality of trainees that may become employed by your institution? Please provide examples.
6. Further exploration of any areas covered on the Web survey...
7. Additional comments/suggestions to improve regional training capacity or to improve recruiting/hiring processes.

EDUCATION/TRAINING PROVIDERS

1. In what ways do you communicate and cooperate with local employers to assure the quantity and quality of trainees that receive their training from your institution? Please provide examples.
2. Do you have formal training or employment agreements with local employers (covering internships, on-the-job training, after-training coaching, and continuing education)?
3. Does your institution have articulation (vertical or horizontal) agreements in place with other training institutions? For which courses or programs are these in place? With what other institutions?
4. Does your institution provide update training (recertification, upgrade) for existing employees of local healthcare businesses? Please list those courses or areas and businesses if appropriate.
5. Is your institution currently undertaking curriculum development to (1) add new courses or programs or (2) updating programs or courses based on needs? If yes, what areas are being revised? What data indicated a need for revisions?
6. Are there specific courses or programs that should be revised, combined, or created that would streamline the healthcare education process? What are these courses or programs? Please list.

PART 2: Data

The table on the following page is designed to provide specific data concerning Healthcare Programs at your school, college or training institution. Please use the table to answer the following questions regarding your program. If extra space is needed simply add rows to the sheet as necessary. If you have questions, please do not hesitate to contact PDG.

1. What Healthcare training programs do you currently offer? Please list by program and course. (Column 1)
2. What degrees, credentials or licensures result from completing these programs? Please list by program. (Column 2)
3. What are typical tuition costs associated with each of your programs? (Column 3)
4. How many students are currently registered and enrolled in each program? (Column 4)
5. What are your projected (planned) enrollment targets for each program for the next 5 years? (Column 5)
6. How many students graduated or received credentials from each program during the past three years? Please use numbers of actual students and % completion rates. Columns (6 and 7)
7. How many students were placed in employment upon completion of each program? (Column 8)

STUDENT INTERVIEW PROTOCOL: CNA/CMA

1. As you envision your next position upon graduation, how important will **interpersonal** and **communication skills** be to your success in fulfilling your duties in that setting?
 - a. Give one or two **examples of skills** you will need and explain why these skills will be important:

2. To what extent were the above skills emphasized during your **classes** or **clinical experiences** at this institution?
 - b. Were interpersonal/communication skills actually **practiced** or **assessed** during your program, or did instructors simply present related information?

3. As you envision your next position upon graduation, how important will **problem solving** and **critical thinking** be to your success in fulfilling your duties in that setting?
 - c. Give one or two **examples of situations** where you have been challenged to solve problems or think critically and why that was important:

4. To what extent were **problem solving** and **critical thinking** emphasized during your classes or clinical experiences at this institution?
 - d. During classes or clinical experiences, did you engage in **problem solving** or **case study scenarios** as a learning experience? If yes, give examples.

5. As you envision your next position upon graduation, how important will **leadership and teaming/team building skills** be to your success in fulfilling your duties in that setting?
 - e. Give one or two **examples of situations** where you could exercise leadership behavior and why that would be important:

6. To what extent were **leadership/teaming/team building skills** emphasized during your classes or clinical experiences at this institution?

STUDENT INTERVIEW PROTOCOL: RN/BSN

1. In your current position, how important are **problem solving** and **critical thinking** to your success in fulfilling your duties?
 - f. Give one or two **examples of situations** where you have been challenged to solve problems or think critically and why that is important:

2. To what extent were **problem solving** and **critical thinking** emphasized during your classes or clinical experiences during your education program?
 - g. During classes or clinical experiences, did you engage in **problem solving** or **case study scenarios** as a learning experience? If yes, give examples.

3. In your current or future positions, how important are **leadership and teaming/team building skills** to your success in fulfilling your duties?
 - h. Give one or two **examples of situations** where you could exercise leadership behavior and why that would be important:

 - i. To what extent were **leadership/teaming/team building skills** emphasized during your classes or clinical experiences at this institution?

 - j. Do you aspire to advance into a leadership position in the future? If yes, where/how will you develop the **skills needed to be successful**?

4. How familiar are you with various **specialty certifications** in your field? Have you/do you plan to obtain training and certification in any specialties (e.g., Perioperative nursing, oncology, psychiatric nursing)?
 - k. During your **educational preparation** or **clinical experiences**, did instructors or preceptors discuss or make information available to you relating to specialty certifications?

EMPLOYER ELECTRONIC DATA WORKSHEETS

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A B C D E F G

1 **Part 1: NEEDS ASSESSMENT - Current Employees**

2 REGION 18, SARASOTA AND MANATEE COUNTIES

3 Employer Organization Name: _____

4

5	Employed Worker Job Titles	Entry Salary	Salary Range		Type of Skill Upgrade or Training Needed	Target Credential or License Obtained through Training	# of Employed Needing Training
			Low	High			
6							
7							
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