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Executive Summary

The creation of the Inland Health Professions Coalition (IHPC) was based on the premise that no single organization or academic institution in a region as large as the Inland Empire can effectively address the various challenges that arise from diversifying health career pathways. A major function of the organization is to enhance and facilitate ways for different systems to work together, and to advance health pathways through structured opportunities for discussion and knowledge exchange.

This report summarizes IHPC's inception and expansion, noting key events such as IHPC's presentation to the statewide California Health Professions Consortium and the California Health Workforce Association in Oakland, when former U.S. Surgeon General Dr. David Satcher also presented. This event was significant as it marked the turning point when IHPC began to be regarded as a model for regional health workforce pipeline planning and implementation. IHPC is now the oldest regional pipeline coalition in the state, and as a pioneer of promoting diversity in the health workforce, is regularly asked to submit recommendations to the California Health Workforce Alliance and the State Health Workforce Development Council.

An assessment of current labor market conditions in the region also was conducted. The health care industry currently accounts for about 137,000 jobs in the Inland Empire and is projected to add about 24,000 new jobs by 2021. When compared to national, state and other regions in California, the projected five-year employment growth of 17.4% in the Inland Empire is the strongest compared to other regions in the state and is three percentage points higher than the state average. In addition, the ethnic and racial disparities for higher-wage occupations that require advanced education degrees have decreased, demonstrating a positive change.

IHPC is focused on continuous improvement, a philosophy that is reflected in some of its year-over-year performance measures. For example, IHPC offered 50 student internships during the 2016-17 academic year, compared to 19 in the 2015-16 academic year. In the 2015-16 academic year, 153 mock interviews with students were conducted. This number increased to 193 in the 2016-17 academic year.

Overall, IHPC has expanded the number of programs available to students and teachers. In the 2015-16 academic year, IHPC added six new programs, such as 911 Camp, Get Psyched! and HEAL Mentoring. In the 2016-17 academic year, it launched an additional 23 programs, including the Health Occupations Training (HOT) program, 13 new JUMP clubs, and the JUMP Spring Showdown, which had 300 attendees. Most significantly, the number of students and teachers served by IHPC has more than doubled over the last two years. In the 2015-16 academic year 3,427 teachers and students were served compared to 7,684 in the 2016-17 academic year.

The scope of IHPC's work regionally is evident in its diverse network of partners. IHPC has developed active partnerships with 17 K-12 school districts in Riverside and San Bernardino Counties, providing programs to 63 individual schools. IHPC has gathered 24 higher education partners, 72 workforce partners and an additional 25 partners in other areas, such as nonprofits, statewide health care organizations and governmental entities. In the 2016-17 academic year, IHPC also formed 39 MOUs with new health partners.

Among IHPC's most valued services are its Nexus Groups and conferences/convenings. Attendance of the annual Health Professions Conference has grown steadily over the years, and skyrocketed over the past year. In 2015-16, 445 students attended the conference compared to 874 in 2016-17.

As part of its qualitative approach, the evaluation team conducted interviews and created an online survey, which received 136 responses.

- The most frequently utilized services by IHPC stakeholders who participated in the survey were IHPC conferences, student work-based learning activities and Nexus group meetings.
- IHPC was rated most highly for engaging a diverse group of stakeholders, followed by engaging educational institutions.
- Nearly 70% of education respondents said IHPC had helped them make new connections.
- 85% of respondents report that they received “a lot/a great deal of support” from IHPC.
- Occupations that survey participants felt had been most positively impacted include: behavioral and mental health professions; allied health professions; and public health professions.
- 73% of respondents said IHPC is “very effective” or “mostly effective” in bringing new opportunities to support the advancement of students along the pipeline.

The evaluation team set out to establish whether IHPC is achieving success in four main areas. Key findings for each area include:

Leadership and intermediary services—Because IHPC has been active in the region for over a decade, it now has a proven and well-respected track record, which attracts new partners and results in invitations for IHPC to lend its expertise to initiatives and grant projects throughout the region. IHPC’s role as a convener is highly valued by stakeholders. Networking and collaborative opportunities for employers and educators are viewed as meaningful and worthwhile.

Strategic partnerships—IHPC’s work is having a regional and a statewide impact through participation in efforts by groups such as the California Health Workforce Alliance, California Health Policy Council and California Health Professions Consortium. The frequency and consistency of the organization’s Nexus Group meetings, quarterly meetings and conferences attests to IHPC’s ability to engage a diverse range of stakeholders across many health professions. New linkages have resulted in improved and expanded service delivery offered by IHPC.

Workforce pathways collaboration—Aside from facilitating communication across diverse stakeholders, internships were the most commonly cited beneficial service offered by IHPC, which serves as an intermediary by fielding student applications and connecting students to alleviate competition among school districts and reducing the burden on employers. IHPC has made it a priority to develop non-traditional internship settings and standardize internship expectations across the region. Other critical services provided to students include mock interviews, job shadowing, classroom speakers, camps, clubs, seminars and outreach to inform students of work-based learning opportunities.

Policy and practice change—Phone interviews and online survey write-in responses reveal that HIPAA and other workforce regulations, such as age requirements, data security and liability issues, impede the provision of work-based learning experiences for students in the region, particularly in clinical settings. Based on the amount of programs and internships offered by IHPC and the number of students and teachers served, it appears the organization is helping educational providers and employers overcome these barriers.

“They are passionate, committed, dedicated and work hard to ensure success. Grassroots efforts are key. They are from the community, working within the community and empower the community.”

— Dr. Katherine Flores, director,
Latino Center for Medical Education and Research, UCSF Fresno

Introduction

For over a decade, the Inland Empire has grappled with a health workforce shortage and lack of primary care capacity. The Press-Enterprise, the San Bernardino Sun, California Healthline and KPCC have reported extensively on such issues as the region's scarcity of specialists, primary care doctors, obstetricians and gynecologists, nursing assistants and residencies for medical students. Meanwhile, the health workforce shortage is only expected to become exacerbated as an aging workforce retires.¹

The Inland Empire has the most severe doctor shortage in California, an issue which has received much scrutiny in recent years and which resulted in the formation of the University of California, Riverside's School of Medicine.² According to the Association of American Medical Colleges, there are on average 90 primary care physicians per 100,000 residents nationwide.³ In the Inland Empire, however, there are 34.5 primary care physicians per 100,000 residents, nearly two-thirds less than the national average, according to data provided by the California Health Care Foundation.⁴ In addition, Riverside and San Bernardino Counties are designated Registered Nurse Shortage Areas.⁵

However, nursing and physician shortages are not the only occupations facing a health workforce shortage in the Inland Empire. In 2007, indications of shortages in other areas not only in medicine, but in dentistry and behavioral health, spurred educators and employers to develop solutions to this looming problem.

The Inland Empire's rapidly growing and diverse population, coupled with low educational attainment, the anticipated retirement of experienced healthcare professionals and new demands created by health care reform all contributed to a growing need for regional planning on the future health workforce.

The Inland Health Professions Coalition (IHPC), formerly known as Inland Coalition (IC), was established in March 2007 to launch a coordinated effort to address regional health workforce demands. In this capacity over the last 10 years, the coalition has convened education, employer and community stakeholders in Riverside and San Bernardino Counties and the Pomona Valley (eastern Los Angeles

¹ Britt, Bill. "The Inland Empire health workforce hits the road to recovery." October 29, 2015. California Economic Summit. <http://caeconomy.org/reporting/entry/inland-empire-health-care-workforce-hits-the-road-to-recovery>

² Steinberg, Jim. "Physician shortages continue to plague Inland Empire." March 14, 2016. The San Bernardino Sun. <http://www.sbsun.com/2016/03/14/physician-shortages-continue-to-plague-inland-empire/>

³ Center for Workforce Studies. "2013 State Physician Workforce Data Book." November 2013. Association of American Medical Colleges. [https://members.aamc.org/eweb/upload/state%20physician%20workforce%20data%20book%202013%20\(pdf\).pdf](https://members.aamc.org/eweb/upload/state%20physician%20workforce%20data%20book%202013%20(pdf).pdf)

⁴ Supply of Primary Care Physicians by County, 2015. California Health Care Foundation. <http://www.chcf.org/publications/2017/08/physicians-county-maps>

⁵ "Registered Nurse Shortage Areas (RNSAs) by County." November 2014. Office of Statewide Health Planning and Development. <http://gis.oshpd.ca.gov/atlas/content/report/shortage/rnsa.pdf>

County) to facilitate the development and implementation of strategies to expand and strengthen the region's health workforce.

Activities and Interventions

Spring 2017 marked IHPC's 10-year anniversary. To document IHPC's extensive work and achievements over the past decade, Reach Out, the coalition's fiscal agent, contracted a team of independent evaluators to conduct a 10-year retrospective evaluation of the organization's progress towards its goals.

Nonprofit organizations often use evaluations to define success and measure results that can be leveraged to create lasting change. The aim of this report is no different. The following sections serve as a summary of the evaluative research and analysis assessing the effectiveness of IHPC's efforts to address the need for a more diverse and competent health workforce in the Inland Empire.

Over the last 10 years, IHPC has introduced many innovative initiatives and interventions to accomplish its mission. One of the objectives of this evaluation was to understand how widely IHPC's services have been utilized by regional stakeholders and how valuable these stakeholders find them. The activities that IHPC conducts on a regular basis can be grouped in four main categories, which is reflected in this report's structure:

- Leadership and intermediary services,
- Strategic partnerships,
- Workforce pathways programs, and
- Policy and practice change.

The following table illustrates the activities associated with each category.

Category	Related Activities
Leadership and intermediary services	<ul style="list-style-type: none"> a. Health workforce data collection b. IHPC quarterly meetings c. Health workforce Nexus Group meetings d. State consortia, professional organizations, governmental groups and alliances
Strategic partnerships	<ul style="list-style-type: none"> a. Resource development partnerships, including outreach to new and existing health entities to engage in workforce development b. Technical support to employers
Workforce pathways programs	<ul style="list-style-type: none"> a. Conferences b. Professional development for teachers: <ul style="list-style-type: none"> • Training workshops for teachers • Teacher externships c. Student services: <ul style="list-style-type: none"> • Internships and work-based learning (such as student clubs, camps and seminars) d. Technical support to school sites
Policy and practice change	<ul style="list-style-type: none"> a. Identification of barriers b. Systems changes c. Advocacy initiatives

Methodology

The purpose of this evaluation was to document the program design that IHPC established to achieve its mission and provide a qualitative assessment of IHPC's progress toward achieving established goals over the past 10 years, since the founding of the organization in 2007.

The research team employed primarily qualitative research methods and focused on formative evaluative techniques, where possible. The research consisted of three phases:

- 1) Developing a logic model,
- 2) Collecting data, and
- 3) Analyzing data.

Logic Model

To document the overall theory of change pursued by the coalition, the evaluation team started by conducting in-depth interviews with the executive leadership of the organization to clarify IHPC's mission, vision and goals, determine activities and outcomes, and identify linkages between them.

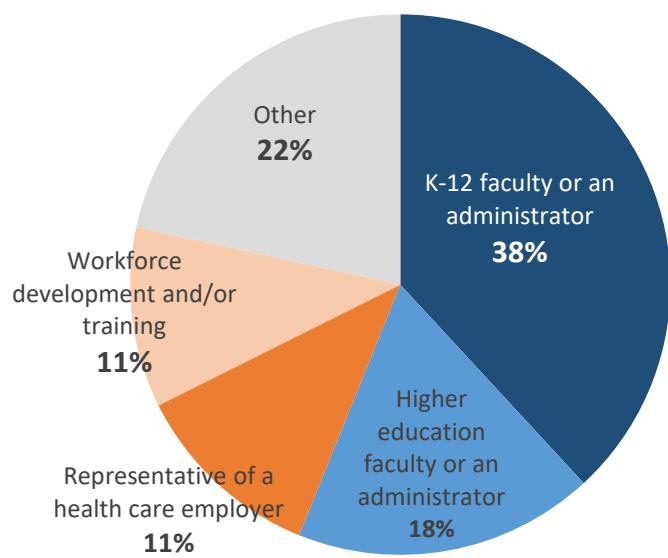
The research team also reviewed extensive documentation provided by the organization's leadership, such as multi-year strategic plans. The resulting logic model was used to further determine which metrics IHPC should use as it tracks future activities to assess its performance and verify outcomes.

Data Collection

Data for this evaluation were collected using the following approaches:

- 1) **Qualitative review of historic documents** provided by IHPC was completed by the evaluators. The documents included reports on grants and contracts, minutes of meetings, pre- and post-survey results of individual interventions, participant lists, board reports, annual briefs, marketing materials for events, and other related organizational documents.
- 2) **An online survey** of IHPC clients, partners and stakeholders was conducted in May and June of 2017. The survey questions targeted the main strategic goals of IHPC and used rating scales to seek respondents' input on IHPC's effectiveness and progress in achieving goals. Convenience sampling was employed to maximize the response rate. The survey was sent to 2,558 recipients; 136 full and partial responses were collected, resulting in a response rate of about 5%. However, since some

FIGURE 1 – ONLINE SURVEY RESPONDENTS BY ROLE (N=133)



respondents skipped questions, an average number of responses per question was 105. The survey respondents represented a wide range of roles and organizations. (See Figure 1.⁶)

- 3) ***In-depth phone interviews*** with key stakeholders of IHPC also were conducted. Current and former partners of IHPC were interviewed. The leadership of IHPC provided contact information for 23 stakeholders who represented a diverse group of IHPC clients and partners. The research team was able to complete 15 in-depth interviews.
- 4) ***Available labor market information*** for health careers in the Inland Empire was accessed using reports and data tools developed by the Centers of Excellence for Labor Market Research, a division of the California Community Colleges Chancellor's Office.

Analysis

Collected data were analyzed using primarily descriptive methods; the research design and available information did not allow for inferential analyses.

Survey results and labor market data were summarized in tables and charts. The research team also conducted common theme analyses of the qualitative data collected through document review, interviews and open-ended question responses incorporated in the online survey.

Based on these analyses, areas of need were identified and provided in this report.

Challenges and Disclaimers

Available documentation suggests a need for consistent data collection by IHPC to measure the organization's overall performance and specific outcomes linked to its programs and initiatives. Documents provided to the evaluation team did not contain quantifiable data; time references could not be determined in a number of cases.

While the research team hoped to reconstruct a historic timeline of the coalition's activities and progress year by year using quantitative process metrics, it was determined that this task would require additional resources and data that were not readily available. The research team recommends that IHPC incorporate timelines in its future reports.

While some quantitative measures were available for specific years, they were not consistently documented for all years or across all activities. Hence, this report looks at the interventions conducted over the last 10 years as a whole and focuses on survey data and qualitative analyses to draw conclusions. The evaluators have made separate recommendations for future data collection and tracking that will allow IHPC to conduct more robust and comprehensive evaluation research in the future.

Given that this report largely relies on material gathered from online survey data and phone interviews, it is important to note that the survey was conducted using convenience sampling, which could potentially create self-selection biases.

⁶ Other category includes health professionals, students, adult school teachers, government agency representatives and members of community at large.

Institutional Overview

Coalition Inception

The Inland Coalition was established in March 2007 by the Latino Health Collaborative (LHC) and Reach Out to convene health professions stakeholders in Riverside and San Bernardino counties and the Pomona Valley. The LHC and Reach Out recognized that a concerted effort was needed to direct high school students into health career pipelines, not only to curb high school dropout rates, but to address health disparities in the region.

At the time, those involved in the formation of the coalition felt IHPC could positively impact regional health outcomes, educational attainment and economic development in the Inland Empire.

According to Diana Fox, executive director of Reach Out, the coalition was established to help the region identify emerging issues; bring people together to create clear visions, solutions and new directions; and serve as a vehicle to facilitate catalytic functions.

At first, IHPC was described as an entity that would collaborate with health care businesses, K-12 schools, community colleges, universities and governmental organizations in San Bernardino and Riverside Counties and the Pomona Valley to improve health outcomes and build a diverse health workforce. Its tagline read, *“Advancing Diversity and Education in the Health Professions.”*

From 2006 through 2007, the organization’s vision was expanded through several focus groups led by Reach Out and the LHC. Leaders throughout the Inland area were asked, “What is impacting the health of our region most profoundly, and what do we do about it?”

Focus group participants unequivocally identified the lack of a sufficient, culturally competent, diverse health workforce as a top contributor to the poor health outcomes experienced by Inland Empire residents.

Following this process, Reach Out and the LHC met with other groups from across the state who had experience in health professions pipeline development, which led to engaging local partners who had the desire and expertise to build the coalition. IHPC then started working with school districts, community colleges and universities to create seamless pathways for health care professions. Working with its partners, the coalition began offering training and technical assistance along with research and evaluation.

In 2007, IHPC received funding from the California Endowment to participate in a strategic planning process that would shape and clarify core strategies, strategic goals, key outcomes and roles to inform and sustain the coalition’s work. The grant project was the result of a rising awareness that no single organization or academic institution could effectively address the challenges in diversifying health careers in the region, but that greater integration and collaboration could build a long-lasting infrastructure that would lead to increased opportunities in health careers.

The Inland Coalition’s fiscal agent is Reach Out (established in 1969), an anchor direct service provider and policy/advocacy organization in Inland Southern California taking a leadership role in community development and advocacy coalitions. Reach Out’s combined years of impactful and successful intermediary/backbone experience totals over 23 years. Reach Out currently employs 63 staff members and serves more than 30,000 youth and adults each year.

In September 2008, IHPC conducted a kickoff event titled “K-12 Strategies and Solutions – Cultivating and Positioning Future Health Care Leaders.” The event targeted executives from government agencies, industry and school districts to establish a network of support connecting the K-20 educational pipeline to health care employers (Figure 2). This network would be dedicated to addressing the educational and social needs of underrepresented minority youth while simultaneously meeting the needs of the region’s growing health care workforce.

In 2009, IHPC’s purpose was redefined, stating its mission was to **“Achieve a health workforce that is diverse and community-responsive.”**

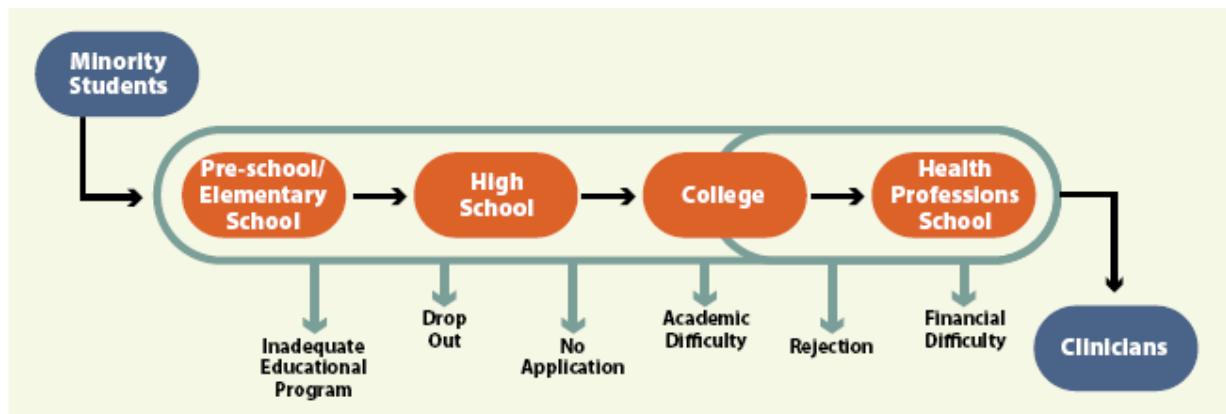
The organization’s new goals were:

- 1) Work collectively to identify and facilitate solutions to the educational, social and environmental barriers to a seamless health pipeline; and
- 2) Support coalition members through information dissemination, training/technical assistance, research and evaluation, policy development, advocacy, and coalition building.

IHPC’s initial intervention strategies included:

- Conferences,
- Monthly meetings,
- Speakers, and
- Collaboration through the San Bernardino County Cradle to Career Initiative.

FIGURE 2 – HEALTH PROFESSIONAL EDUCATIONAL PIPELINE



Adapted in UC's Strategies (p.9) from Fig. 2-1 of "HCOP: Evaluation of the Health Careers Opportunity Program Summer Programs," Houston & Associates, 1994

IHPC's expansion was spurred through a need to coordinate numerous siloed efforts that were being executed at all levels of the health care pipeline across the region. Previous efforts represented a "piecemeal" approach to addressing a regional shortage of health care workers. Instead, the region needed an integrated strategy that could achieve meaningful and measurable progress. IHPC stepped into the breach to tackle this complex and unwieldy issue.

Attention was directed toward bringing together the region's broad range of constituents through conferences and working groups. In May 2010, IHPC sponsored the first annual regional Health Careers Conference on the campus of California State University, San Bernardino.

More than 400 high school students attended the conference for a day of meeting health professionals, attending health career breakout sessions and interfacing with college student health science clubs and organizations. Session presenters included local hospitals, university faculty and students, proprietary colleges, emergency rescue personnel, health media specialists and staff from the California Primary Care Association (CPCA) and the Office of Statewide Health Planning and Development (OSHPD).

In 2010, due to organizational challenges, the Latino Health Collaborative stepped out of its role with the coalition, and Reach Out became the sole backbone agency for IHPC.

Around 2013, IHPC expanded its efforts beyond what had been envisioned just a few years earlier. Some of the earlier objectives set by the 2009 plan had been attained, and the number of interventions to achieve its vision increased significantly. By that time, some of organization's achievements were:

- 1) IHPC was a partner in making recommendations for a five-year behavioral health plan through regional Workforce Employment and Training Forums.
- 2) The San Bernardino County Workforce Investment Board (WIB) and Riverside WIB, as members of the coalition, provided workforce intelligence as requested.
- 3) The coalition upgraded its website (www.inlandcoalition.org) with information and regional intelligence on health careers. A campaign to promote the website started in September 2013.
- 4) Weekly newsletters, known as the "Weekly Update," containing health career-related information were sent out to all partners beginning in October 2013.
- 5) The coalition attended state and regional workshops and annual conferences on health career education and workforce development to present on its innovative model and gather information regarding funding, new programs and opportunities. These conferences provided opportunities for the coalition to offer its perspective and raise awareness on the needs and issues facing the Inland Empire.
- 6) The coalition expanded its participation in regional initiatives. The organization became a member of the Linked Learning planning council, California Community Colleges' Health Workforce Initiative, the San Bernardino Countywide Vision Community Vital Signs Initiative, Riverside County Strategic Health Alliance Pursuing Equity (SHAPE) Initiative and several Healthy Communities initiatives.

- 7) In 2014, IHPC was a member of the Work-Based Task Force convened by the California Hospital Association and Hospital Association of Southern California to create a guide for employers and educational institutions to effectively conduct work-based learning (WBL).

For the first five years of its existence, IHPC struggled to raise sufficient funds to address regional health pipeline issues as there was limited awareness of the problem among both funders and local governments. After the Affordable Care Act was signed, it became clear that health professions pipeline development would become even more critical for improved health outcomes. As a result, building sustainable workforce pipelines became part of the regional and state agenda, and funders were more willing to support IHPC. Additional funding allowed IHPC to build meaningful infrastructure and sustainability from 2012 through 2017.

As IHPC evolved, it became evident that a sub-regional approach would be most effective in addressing the needs of pipeline development and reducing the primary care shortage, especially in a region with such diverse demographics and varied economic geographies as the Inland Empire. Part of this approach involved the creation of sub-regional Nexus Groups with membership comprising local education, industry and government stakeholders to address local concerns. These groups gradually expanded, and by 2016 four sub-regional Nexus Groups tasked with developing and adopting strategic solutions to strengthen targeted health pipelines had been formed.

In 2013, Kevin Barnett of the California Health Workforce Alliance proposed the concept of a “collective impact” model of health workforce development at a conference hosted by the coalition, which has since adopted many of his proposed principles and implemented them regionally. The model employs strategies to make optimal use of regional resources and support from external sources.

The concept was based on a model developed by consulting firm FSG that emphasizes the following:

- Building a common vision,
- Establishing a set of common metrics,
- Aligning programs and investments to ensure they are mutually reinforcing,
- Continuous communication, and
- Establishing a “backbone” entity charged with facilitating and monitoring progress.

The coalition’s early efforts to build connections between health care employers and educators put the Inland Empire region ahead of others in building health pathways.

Several interventions were instrumental in building regional health pathways, such as activities for middle school and high school teachers and students, assistance with curriculum development, funding support and engagement of local businesses.

On March 14, 2013, IHPC made a presentation to the statewide California Health Professions Consortium and the California Health Workforce Association in Oakland. Former U.S. Surgeon General Dr. David Satcher also presented. This event was significant as it marked a turning point, and IHPC began to be regarded as a model for regional health workforce pipeline planning and implementation. IHPC is now the oldest regional pipeline coalition in the state.

In response to input from its partners, the Inland Coalition officially changed its name in 2014 to the Inland Health Professions Coalition (IHPC).

Primary funding support for this work over the past two years has originated from the California Endowment, along with small grants from California's Office of Statewide Health Planning and Development (OSHPD) and sponsorships from local community benefits programs.

A major function of IHPC has been to enhance and facilitate ways for different systems to work together in new and innovative ways. The scope of this work is reflected in the breadth of the coalition's membership: faculty and administrators from K-12 schools and school districts, community college and university faculty, hospital and health care business and agency representatives, county offices of education and workforce development staff, and professional organizations and community agency representatives.

"IHPC has been a real trendsetter in the state, if not the whole nation. They continue to be critical in helping workforce diversify and helping participants engage and visualize their potential."

— Christina Bivona-Tellez,
assistant professor,
Azusa Pacific University School of Nursing



Labor Market Conditions

A key part of IHPC's mission is to support the regional workforce in response to the needs of employers. To further this goal, IHPC implemented several initiatives targeted at collecting accurate and up-to-date labor market information on health professions. The following represents the summary of the historic and current conditions of the health care labor market within the organization's service area.

2012 Health Care Labor Market

The initial assessment of labor market needs of the Inland Empire was conducted in 2012, when IHPC partnered with the Inland Empire/Desert Region Center of Excellence for Labor Market Research. The partnership resulted in the report, "Healthcare Industry and Occupations in the Inland Empire," released in May of 2014, which identified occupations with significant training gaps and confirmed a need for building health workforce pathways across the region.

The study found the health care workforce in the Inland Empire accounted for 8% of the total workforce and employed more than 115,000 people in 2012. With average annual earnings of \$59,203, almost \$15,000 more than average annual earnings across all other sectors, health care occupations provided an excellent economic opportunity for the region's residents and pathways out of poverty for vulnerable populations. National health care reform through the Affordable Care Act (ACA) was expected to make a significant impact on demand for health care workers in the Inland Empire.

The Inland Empire's health care workforce did not reflect the region's racial and ethnic diversity in 2011, specifically in higher-level careers, the study found. While Hispanic residents comprised of 45% of the Inland Empire's population in 2012 and were projected to make up 49% by 2020, only 12% of registered nurses (RNs), the largest health care occupation in the region, were of Hispanic origin.

Key 2012 Health Care Report Findings:

- The ratio of health care workers to residents in the Inland Empire was 1:34, much lower than Orange County (1:22), Los Angeles County (1:23) and San Diego County (1:24).
- Employment of registered nurses (28% of all jobs at hospitals) was expected to grow by 16% over the five-year period. Compared to the national average of 860 RNs per 100,000 in population, the Inland Empire had 515 RNs per 100,000, earning a "D" rating in the 2010 Report Card from the California Institute for Nursing and Health Care.
- In the Inland Empire, the ratio of primary care physicians to the population was 40 per 100,000 in 2008; far below the nation's standard of 65 to 80 per 100,000.
- The Inland Empire has some of the lowest educational attainment rates in the state, with only 28% of its population holding some type of a college degree or award.
- Approximately 16% of Riverside County and 18% of San Bernardino County residents live below the poverty line.

All the 2012 labor market report findings underlined the need for IHPC services in the region and confirmed the relevance of IHPC goals related to the labor market.

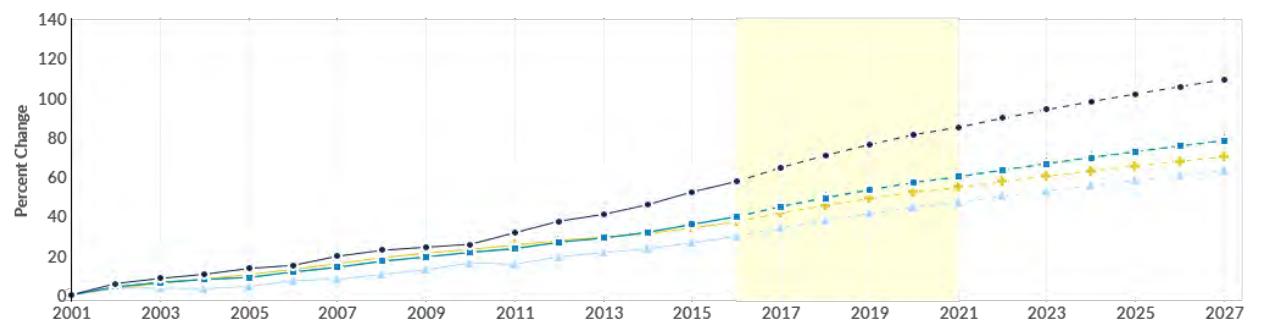
Current Labor Market Conditions

For this report, the evaluation team reviewed available labor market data to identify progress related to health professions employment in the region and confirm the relevancy of IHPC goals to the needs of employers. Based on labor market data analysis, the health care industry currently accounts for about 137,000 jobs in the Inland Empire and is projected to add about 24,000 new jobs by 2021.

Industry employment increased by almost 20% between 2012 and 2017, confirming the robust growth projected in the initial labor market assessment. When compared to national, state and other regions in California, the projected five-year employment growth in the Inland Empire is the strongest – 17.4%, which is 3% higher than the state (Figure 3).

In 2017, the health care sector continues to provide opportunities for high-wage employment in the region, with average industry earnings per worker of \$68,754. This represents a 16% growth in earnings across the sector over the last five years. Wage increases that are above average may indicate potential workforce shortages in the labor market.

FIGURE 3 – REGIONAL HEALTH CARE INDUSTRY EMPLOYMENT, 2016-2021



Region	2016 Jobs	2021 Jobs	Change	% Change
Inland Empire	137,667	161,670	24,003	17.4%
California	1,511,708	1,729,661	217,953	14.4%
Bay Region	340,487	385,761	45,274	13.3%
Nation	15,727,550	17,723,486	1,995,936	12.7%

Source: Emsi Q3 2017 Data Set | www.economicmodeling.com

Of all the occupations that comprise the health care sector in the region, registered nurses account for about 15% of all jobs and are paid \$45 per hour, the equivalent of about \$94,000 in annual salary. This occupation is projected to increase employment by 18% in the next five years.

Figure 4 displays the 15 largest health care occupations that pay high wages and are expected to expand employment, some rapidly growing by 22% to 24%.

These occupations vary in educational attainment requirements; for some, such as medical assistants, short-term certificate programs are needed, while for others, such as physicians, professional degrees are mandatory.

The range in educational requirements for health care occupations means that careful regional planning is needed to meet increased employer demand for a competent health care workforce.

FIGURE 4 – TOP 15 LARGEST HEALTH CARE OCCUPATIONS IN THE INLAND EMPIRE, 2016-2021

Description	2016 Jobs	2021 Jobs	New Jobs	% Growth	% of All Jobs in the Sector	Median Hourly Earnings
Registered Nurses	21,363	25,203	3,840	18%	15.5%	\$45.21
Medical Assistants	7,029	8,202	1,173	17%	5.1%	\$14.04
Nursing Assistants	6,163	7,640	1,477	24%	4.5%	\$13.83
Licensed Vocational Nurses	6,009	6,976	967	16%	4.4%	\$23.50
Medical Secretaries	5,497	6,349	852	15%	4.0%	\$15.70
Dental Assistants	4,543	5,153	610	13%	3.3%	\$15.23
Health Technologists & Technicians, All Other	2,711	3,361	650	24%	2.0%	\$19.38
Dentists, General	2,057	2,246	189	9%	1.5%	\$70.45
Physicians and Surgeons, All Other	2,054	2,313	259	13%	1.5%	\$76.11
Billing and Posting Clerks	2,049	2,371	322	16%	1.5%	\$17.57
Medical and Health Services Managers	1,788	2,184	396	22%	1.3%	\$52.31
EMTs and Paramedics	1,677	2,042	365	22%	1.2%	\$14.73
Dental Hygienists	1,546	1,828	282	18%	1.1%	\$45.33
Radiologic Technologists	1,536	1,767	231	15%	1.1%	\$33.54
Respiratory Therapists	1,289	1,446	157	12%	0.9%	\$34.66

Source: Emsi Q3 2017 Data Set | www.economicmodeling.com

In terms of workforce diversity trends in 2017, there has been progress with increasing diversity of the health care workforce overall. However, some equity gaps still exist. For example, Hispanics make up almost half the total regional population, but comprise only one-third of the health sector workforce (Figure 5).

The ethnic and racial disparities for higher-wage occupations that require advanced education degrees have decreased, demonstrating a positive change. For example, Hispanics currently represent 18% of the registered nursing workforce compared to 12% in 2012.

While this significant improvement (a 50% increase) in RN workforce diversity cannot be directly attributed to IHPC's efforts, IHPC has partnered with the largest employers in the region on many

diversity initiatives that are considered best practices in the nation and that are aimed at improving workforce diversity.

Just as in 2012, the current labor market and demographic data validate the need for region wide planning for stronger health care pathways that provide multiple career options, especially for high-wage occupations with significant racial/ethnic gaps.

The mission and goals of IHPC remain relevant to the demographic and economic environment and the changing needs of the region. The data analysis also reveals positive trends in the diversity of health workforce that can be partially attributed to the successful strategies of IHPC and its partners.

FIGURE 5 – RACIAL AND ETHNIC COMPOSITION OF INLAND EMPIRE HEALTH CARE WORKFORCE

Race/Ethnicity	% of Population	% of Health Care Workforce	% of Registered Nurses
White	32.9%	39.0%	45.6%
Hispanic or Latino	45.8%	33.8%	18.3%
Asian	7.2%	16.7%	26.6%
Black or African American	8.2%	8.4%	7.6%
Two or More Races	3.5%	1.4%	1.4%
American Indian or Alaska Native	1.9%	0.3%	0.3%
Native Hawaiian or Other Pacific Islander	0.5%	0.3%	0.2%

Source: Emsi Q3 2017 Data Set | www.economicmodeling.com



Strategic Framework

The main mission and strategic direction of IHPC was articulated in the working name for the Inland Coalition—Advancing Diversity and Education in the Health Professions. IHPC's main strategic goals established in 2007-2008 included:

- 1) Achieve a health workforce that is diverse, community responsive and meets the needs of the region's health care employers.
- 2) Work collectively to identify and facilitate solutions to the educational, social and environmental barriers to a seamless health workforce pipeline.
- 3) Support coalition members through dissemination of information and resources, training/technical assistance, research and evaluation, policy development, advocacy and coalition building.

An updated strategic plan was developed and adopted in 2009, which identified seven areas for strategic development and engagement over two years:

- Strategy 1: Civic Engagement, Policy and Systems Change
- Strategy 2: Growth (to find a balance between geographic and programmatic expansion)
- Strategy 3: Funding Diversification and Sustainability
- Strategy 4: Marketing and Communications
- Strategy 5: Board Development
- Strategy 6: Strategic Programming
- Strategy 7: Staff Development

In 2012, a self-reflection and strategic planning activity conducted by IHPC resulted in the confirmation of its goals and development of six main strategies as defined in the "IHPC Strategic Plan Framework." This framework built the foundation for IHPC over the last six years.

The framework developed in August 2012 focused on the following strategies:

- Strategy 1: Regional Health Workforce Nexus Groups
- Strategy 2: Annual Conferences and Workshops on Health Career Education
- Strategy 3: Regional Workforce Intelligence
- Strategy 4: Increasing Health Workforce Diversity
- Strategy 5: Quarterly Coalition Meetings
- Strategy 6: Infrastructure Management for Implementation of the Inland Coalition Strategic Plan

More details from the 2009 strategic plan are provided in Appendix A. The strategies from the 2012 framework are included in Appendix B.

Logic Model

Logic models and theories of change are common tools used by organizations to guide evaluation design and practice. They demonstrate the connections between the work being done by an organization and the types of changes programs are designed to achieve. Having a logic model is generally seen as a positive organizational attribute and demonstrates an organization's ability to plan for an evaluation.

Based on the information collected through the document review and in-depth interviews with IHPC leadership, the following strategic framework and logic model is representative of the current direction of IHPC.

Vision: Facilitate a health workforce that is diverse, relevant to the community and responsive to the needs of employers in Inland Southern California.

Mission: Contribute to the diverse and competent health workforce in the region through research, community-based collaboration, information sharing, professional development, policy change advocacy and facilitation of strong health workforce pathways.

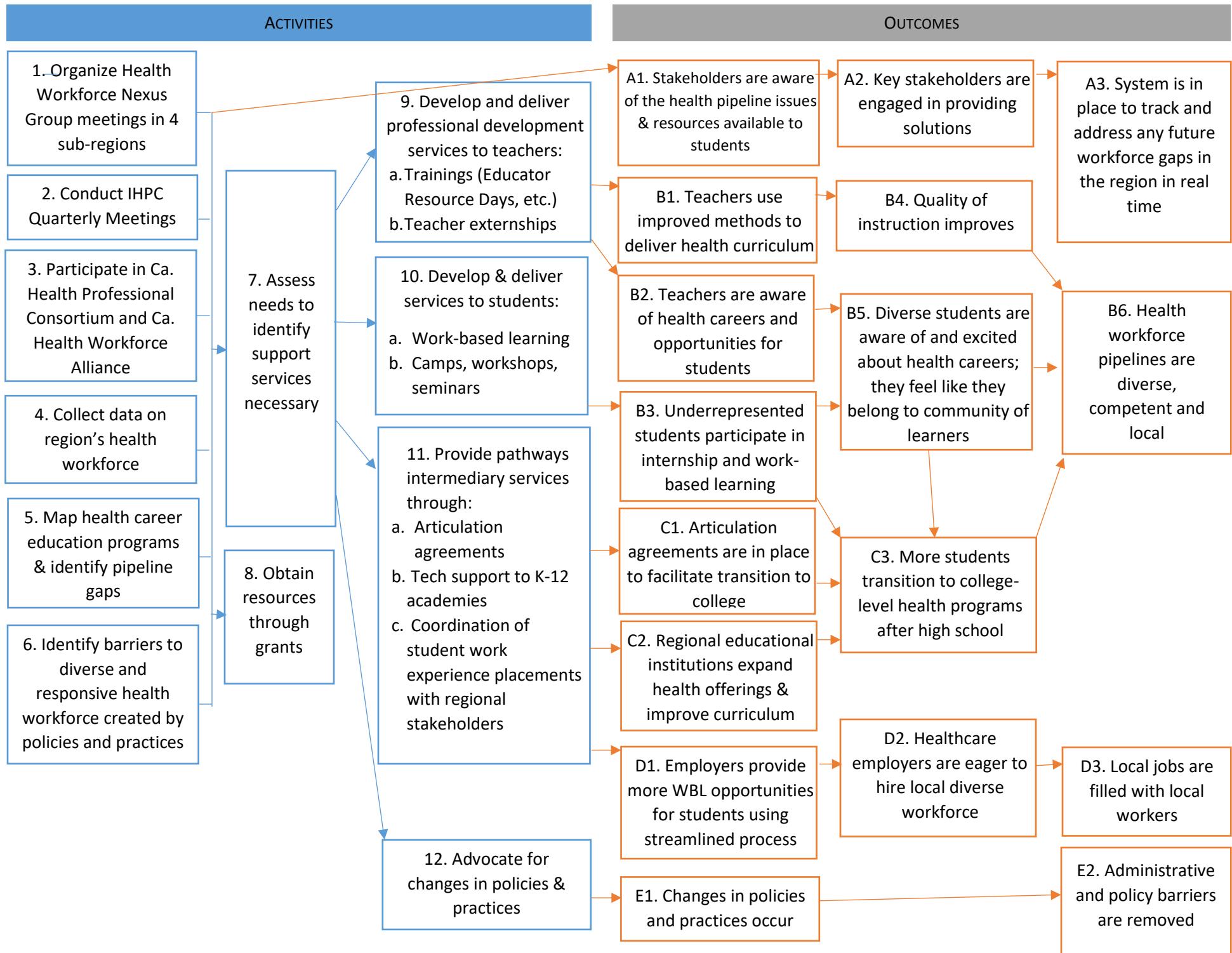
Goals:

1. Identify and facilitate solutions to the educational, social and environmental barriers to a cohesive health workforce pipelines.
2. Build infrastructure to engage key regional stakeholders in the collaborative work and on-going dialogue on health workforce pipelines.
3. Research and monitor data on health workforce trends.
4. Promote diversity in the health sector and build pathways for diverse populations into the region's health workforce.
5. Build awareness among educators about workforce issues.
6. Provide professional development opportunities for health educators.
7. Facilitate connections between health employers, educators and workforce.

Inputs (human, financial, organizational, and community resources):

- Reach Out/IHPC staff
- Funding
- Volunteers
- Collaborators
- Students
- Educator/Teacher learners
- Existing curriculum and tool kits
- Meeting space
- Resources to increase opportunities for students interested in health careers
- Supplies/Computers
- Website and social media outreach
- Accumulated 10-year knowledge base
- Organization's website and social media resources

There are 12 activities/tactics that IHPC is pursuing to target the desired changes. These activities are sequenced and linked to both early and late outcomes. Process and output measures assigned to activities are designed to support formative and process evaluations, while outcome measures need to be tracked for outcome evaluation and impact assessments. (Definitions of work-based learning activities are included in Appendix C. An early draft of the logic model can be found in Appendix D.)



Process Measures:

- Studies produced; workforce data identified
- Documentation of pipeline gaps
- Documentation of policy/practice barriers (# of barriers identified)
- # of partners
- # of employers providing work experiences
- # of students in work-based learning opportunities/events
- # of participating educational institutions (middle and high schools, colleges and universities)
- # trainings for teachers held
- # of attendees/training
- # of conferences
- # of attendees/conference
- Exposure measures of advocacy in policies
- Resources obtained through grants
- Number of articulation agreements
- New curriculum

Outcome Measures:

- Improved knowledge of health workforce
- Learning outcomes of underrepresented students
- Increased awareness among students of health careers
- # of students claiming articulated credits
- # of minority students entering longer-term education pathways (i.e., RN, MD)
- # of students entering health careers
- % of students making family-supporting wages
- # of employers hiring students
- Employer satisfaction with local new hires
- # of students hired each year by regional employers
- # of policy/practice changes
- Tangible impacts of policy changes
- % of residents obtaining jobs
- % of minority populations entering healthcare workforce compared to % of overall population

Assessment: Leadership and Intermediary Services

Targeted Goals and Outcomes

IHPC's leadership and intermediary services targeted the following outcomes of the logic model:

- A1. Stakeholders are aware of health pipeline issues and resources are available to students
- A2. Key stakeholders are engaged in providing solutions
- A3. System is in place to track and address future workforce gaps in the region in real time

IHPC's objective was to provide leadership to guide the region toward a prepared, diverse future health workforce.

Activities and Interventions

Leadership and intermediary service activities included:

- 1) Health workforce data collection
- 2) IHPC quarterly meetings
- 3) Health workforce Nexus Group meetings
- 4) State consortia, professional organizations, governmental groups, and alliances

Progress

To what extent was IHPC able to create the necessary regional infrastructure for a network of support and systems change in the Inland Empire?

A key aspect of IHPC's regional leadership hinges upon data collection and analysis to inform collaborators of areas of need and to tailor pipelines to meet workforce demand. This type of research and analysis is critical for IHPC's leadership role and its role as service provider, guiding the region toward the development of a competent, diverse future health workforce. The organization has filled a void where previously data and information were not, and could not, be gathered and shared in a timely way.

The assessment of need started in 2011, when IHPC entered into a partnership with San Bernardino County, Riverside County and the California Community Colleges' Inland Empire/Desert Region Center of Excellence for Labor Market Research to develop a health care workforce gap analysis study. IHPC played a critical role in helping develop the scope of the study to make it relevant to the regional health care industry. IHPC convened employers and industry groups to provide input and validate aspects of the research. The partnership resulted in the first workforce gap analysis report for the region -- "Healthcare Industry and Occupations in the Inland Empire." IHPC contributed to the dissemination of the report results and conducted the press conference at the 2012 Health Professions Conference to announce the release of the report findings. The findings of the research helped IHPC and its partners target their health pipeline efforts to fill in-demand occupations.

In 2016, IHPC continued its work in obtaining accurate and up-to-date health workforce data by launching a multi-year Industry and Labor Market Intelligence System project for health care in the Inland Empire region. The initial phases of the project were supported and funded by the Workforce Development Department of San Bernardino County. Relying on its network of partners and a labor market consultant, IHPC conducted employer surveys and compiled an updated report on the health

care industry and its occupations. Information was collected on the number of full-time and part-time positions in the region, as well as vacancies in dental, clinical, pharmacy, behavioral health and public health occupations. The report is expected to be released in late 2017. Pending funding, IHPC plans to build a regional system of labor market intelligence to track health employers' hiring needs in real time.

IHPC plays a unique role in labor market intelligence due to its ability to immediately act on data insights. The organization continually engages stakeholders with the health workforce data. For example, the quarterly Nexus meetings provide an inclusive environment where stakeholders can come together to look at the data, explore opportunities and strategize about how to leverage resources. Over the years, this investment of time and effort has paid off. Based on review of IHPC documents and survey responses, IHPC has been able to scale pathway programs and strengthen workforce pipelines to help students acquire the competencies needed to enter a variety of health care professions.

Provision of a regional infrastructure

IHPC serves a much-needed purpose as a regional convener in the Inland Empire, which is geographically vast and socioeconomically varied. Based on interviews conducted by the evaluation team, the organization is applauded by state and regional education experts for providing oversight, a governance structure and a forum for regional decision making.

In March 2013, the California Health Workforce Alliance identified the Central Valley and Inland Empire as priority areas for increasing primary care capacity due to insufficient provider network access. The Inland Empire was identified as a region where a "strong" workforce initiative was already underway and where there was an "acute" workforce shortage.

The alliance chose to focus on expanding the role, training and use of community health workers, promoting medical assistants and other frontline workers to increase primary care capacity, care transformation and health promotion.

As a result, IHPC has worked to advance this goal, with attention toward the following objectives identified by the alliance:

- Increasing workforce diversity,
- Expanding the pool of candidates with diverse backgrounds,
- Aligning resources and access to career pathways for members of the community, and
- Providing rewarding career and job opportunities for California residents.

"IHPC does an exceptional job in providing intermediary services to connect education and employers. They build and provide training that is required by industry. For example, they built training to prepare community health workers, certified nursing, school health counselors, and radiology techs."

— Patricia Etem,
Southern California regional
manager, Health Career
Connections

To help achieve regional goals, IHPC formed four sub-regional Nexus groups, which meet regularly to develop solutions, implement strategies and track accomplishments:

- The **San Bernardino Metro Nexus**, serving the cities of San Bernardino, Colton, Redlands, Loma Linda, Rialto, Yucaipa, Colton and Grand Terrace;
- The **West East Health Professions Nexus**, serving the west end of San Bernardino County and the Pomona Valley;
- The **Riverside Regional Nexus**, serving Moreno Valley, Perris, Riverside, Jurupa Valley, Eastvale, Norco, and Corona; and
- The **Innovation Valley Nexus**, serving Southwest Riverside County.

IHPC is the lynchpin buoying the regional support network. The organization serves a critical role as a go-between and one-stop-shop for educational providers and employers. One important example is the organization's role in the provision of internships. On the workforce side, IHPC works with employers to develop internships and address obstacles or concerns, such as liability issues. On the education side, IHPC connects students with internships, reducing the burden often placed on educators to create internships, and develop and facilitate application processes. This model also prevents employers from becoming overwhelmed by requests for internships from multiple schools or school districts. IHPC serves as the intermediary to screen student applicants from the school districts and place them with appropriate internship providers.

Network of support

IHPC's regional infrastructure is defined by the variety of partners it engages, and the diverse communities served by those partners. IHPC works with school districts, nonprofit youth agencies, hospitals, clinics, regional occupational programs (ROPs), the business community and postsecondary institutions to coordinate and integrate health career pipelines in the Inland region.

One of the most indicative performance measures that shows IHPC's efficacy in outreach is its number of K-12 education provider partners. **The organization has developed active partnerships with 17 K-12 school districts in Riverside and San Bernardino Counties, providing programs to 63 schools.** (See Appendix E for a full list.)

These schools are in rural and remote areas, as well as urban, inner-city areas. Students are racially and culturally diverse, and come from a wide range of socioeconomic backgrounds. Schools that have a working relationship with IHPC include middle schools, high schools, ROPs and alternative learning schools, demonstrating that nearly every age-level and type of student learner within the educational pipeline is being addressed within the region.

In addition, the number of students and teachers served has more than doubled over the last two years. In the 2015-16 academic year, 3,427 teachers and students were served, compared to 7,684 in the 2016-17 academic year.

IHPC has partnerships with two Regional Occupational Programs (ROPs)—Colton, Redlands Yucaipa ROP (CRY-ROP) and Baldy View ROP—that are notable for the scope of the programs they offer and their efforts to provide programs targeting occupations with strong employment outlooks.

IHPC also collaborates with health academies in the region, including Canyon Springs Health Academy, Murrieta Mesa, Chino Hills Health Sciences Academy and Palomares Academy of Health Sciences.

Within its service area, IHPC has formed 24 education partnerships with higher education institutions and organizations outside the traditional K-12 system. These are listed in Appendix F.

Examples of **key education partnerships** formed by IHPC are:

- Loma Linda University Cadaver Lab, which allows student visits using IHPC as an intermediary agency;
- California State University, San Bernardino, which hosts the annual Health Professions Conference;
- Western University, which partners with IHPC to increase the number of students interested in physician assistant and public health careers;
- University of La Verne, which partnered with IHPC to bring Public Health 101 to high school students;
- San Bernardino Valley College, which created an articulation model between high schools and the college for gateway health science courses; and
- San Manual Gateway to College, a partner in IHPC's medical assistant training for Workforce Innovation and Opportunity Act (WIOA) youth.

Examples of **enhanced regional health care employer connections** are:

- San Bernardino County Medical Society, which IHPC recently met with to create internship programs that allow high school students to work in clinics and medical settings;
- San Bernardino County Department of Behavioral Health, for which IHPC promoted the change in the volunteer policy and the creation of the first two public health department internships beginning in January 2014;
- San Bernardino County Department of Public Health, with which IHPC collaborated to place students for internships. Two student interns have participated in the ride-along program;
- Riverside University Health System-Mental Health, with which IHPC facilitated the first student internships in mental health through the "Get Psyched!" program with the departments of behavioral health in Riverside and San Bernardino counties;
- Riverside University Health System-Public Health, whose medical center facilitated an 8-hour job shadowing program with medical residents; and
- Loma Linda University, whose community partnership division worked with IHPC to create a unique opportunity at the university's Simulation Lab, where students can participate in a medical simulation and debriefing.

One interview participant noted that a particularly successful and inspiring partnership that proved life-changing for students was through Pomona Community-Based Adult Services (CBAS). Three years ago, summer internships were piloted with CBAS, and students had the opportunity to volunteer for a 90-hour internship during the summer. Their feedback was inspiring. The interviewee noted:

"Even after a summer working with people who are disabled and elderly, (the students) still wanted to be in the medical field. Most of the kids attended every single day, Monday through Thursday, and the students who missed a couple of days even went back to make up the days. That's an impressive marker of quality to me. We started the first summer at CBAS with six kids,

and at the end of this current school year, we had five or six hundred kids with us throughout the presentations and workshops. It has grown exponentially.”

IHPC's overall number of partnerships contributes to the strength of its regional infrastructure. (Refer to Appendix F for a detailed list.) **Its workforce partners total 72**, including Arrowhead Regional Medical Center, Blue Shield of California Foundation, Borrego Health Foundation and the California Community Clinics Association. **The organization also has 25 partners that fall outside that category** and are non-profit organizations, government agencies, health plans and statewide entities. These partners include:

- California Health Workforce Alliance;
- California Hospital Association;
- California Primary Care Association;
- California Prison Health Care Services; and
- California Wellness Foundation.

The 2017 IHPC online survey designed by the evaluation team generated several positive and noteworthy anonymous write-in responses about the **successful partnerships** fostered by the coalition:

- *“We laud IHPC, we have strengthened partnerships with San Bernardino Dept. of Behavioral Health, with the Clinic Association, with IHPC itself, with universities and with individual professionals. IHPC has an awesome staff, a diverse staff, a dedicated staff, and shares vital information and best practices with grace and gusto!!!”*
- *“Every time that I open an informational email or attend a NEXUS meeting I am supplied with opportunities for the students I serve. I receive a lot of emails on a daily basis, but when I see emails from IHPC I stop and take the time to read them because I know they are full of support for me as an educator or for my students.”*
- *“Our CTE Adult Ed teachers have successfully integrated the content into their curriculum. Additionally, the ‘Preparing for an Informational Interview’ work-based learning student activity has become part of our new Pilot ‘Introduction to Education & Career Planning.’”*
- *“The successful partnership is with IHPC. They have been excellent in advertising events, internships and other opportunities provided by my organization. In addition, their work approach is inclusive and collaborative. The annual high school health conference is important and speakers from my organization are able to be presenters each year.”*

Additional beneficial partnerships highlighted by survey participants include:

- Renaissance Village — “Senior students played games with memory patients and as a result many have applied to be volunteers to continue working with the elderly,” one survey participant wrote
- Kaiser Permanente internships, including the summer program through Kaiser Permanente’s lab in Chino Hills
- Pomona Valley Hospital Medical Center
- Seminars and student field trips through Loma Linda University

- County health departments
- Tri-City Mental Health
- East Side Heal Zone collaborative
- Mt. San Jacinto College nursing department
- American Red Cross
- Workgroups through Community Vital Signs

Inland Empire Systems Change

Based on the perspectives gathered through interviews conducted by the evaluators, it is clear IHPC is viewed not only as a leader in the region for convening stakeholders to address complex workforce challenges and is considered a statewide model for successfully doing so.

IHPC is well regarded and highly respected. Because the organization has been active in the region for over a decade, it now has a proven track record, which attracts new partners and results in invitations for IHPC to lend its expertise to initiatives and grant projects throughout the region. Stakeholders have taken note of IHPC's consistent performance and praise the organization for providing the region with much-needed leadership and strategic direction.

IHPC is also defined by its efforts to increase awareness of available opportunities. A major strength is its ability to communicate and reach employers and educators. Ongoing communication channels have been established:

- Weekly Updates via email which are filled with all the current opportunities for funding, programs, meetings, and essential information for anyone who is engaged in health professions development.
- Licensure and certification publication, charting of health care organizational connections throughout the region, development of resource binders and directory of pipeline programs by sub-region.
- Publication of scholarship opportunities available for students pursuing a health career.
- Resource guide in hard copy and on flash drive provides teacher and student resources for enhancing programs and heightening opportunities.

Because of its track record, the organization is considered by constituents to be a leader in fostering relationships with workforce partners, which is often a challenge for educational institutions. Many survey participants, and interviewees, noted the organization has helped open lines of communication between education and industry. Based on interviews and write-in survey responses, of all the services IHPC provides the region, its role as a convener seems to be the most highly valued by stakeholders. Networking and collaborative opportunities for employers and educators are clearly seen as meaningful and worthwhile.

"I think the value of IHPC's work is its connections. It exposes my teachers to what is really going on and in turn helps us put kids into more work-based learning situations."

— Dr. Gina Boster,
career technical education
director, Corona-Norco
Unified School District

This was confirmed by Lenny Pepper, vice president of special programs and projects at Borrego Health Foundation, in an interview:

*"They ARE the link. They are the go-between organization that brings everybody together to coordinate who are the best fits for their kids and who can provide the experience they need to give them insight for possible career options in the health field. **What they do and how they work as a link between the community, businesses, school districts and pathway programs is where they are so valuable.**"*

This sentiment was mirrored by Kevin Barnett, senior investigator for the Public Health Institute:

*"By my own observation, IHPC has been effective in the engagement of diverse stakeholders. ... I think the clear and demonstrated commitment to serve as an unbiased convener, as an objective convener, has created a safe space for people to come together. The fact that IHPC has had a clear image as being a strong representative of community perspectives has given it strong standing with the institutional stakeholders that may be somewhat distant from that. **Consistency, clarity, objectivity and strong representation of community interest have all contributed to the relative success of IHPC.**"*

To what extent has IHPC been able to establish a staffed entity with a leadership group and the capacity to coordinate efforts to increase and diversify the health care workforce pipeline among key public, nonprofit and private actors?

The **establishment of IHPC's Nexus Groups** have provided a framework for coordinated efforts to increase and diversify the health care workforce in the region. The Nexus Groups are organized by sub-regions throughout the three-county area and allow for stronger collaboration in naturally occurring clusters, anchored by a key partner hospital, industry or university.

These groups bring together important regional constituents, including representatives from public, private and nonprofit sectors, with the goal of facilitating the transition of students from education to internships to careers.

The first Nexus Group was established in the San Bernardino City Metro area – which has one of the highest poverty and high school dropout rates in the nation – in 2012 to accelerate and support educational and career pathways and meaningful links to healthcare employers. This Nexus Group has active participation from San Bernardino City Unified, Colton Joint Unified, Yucaipa-Calimesa Joint Unified and Rialto Unified School Districts.

The West East Health Professions Nexus Group, launched in January 2014, encompasses eastern Los Angeles County and western San Bernardino County. The Riverside Regional Nexus Group was launched a year later, in July 2015. The most recent Nexus Group, called the Innovation Valley Nexus Group, was formed in October 2016 in southwest Riverside County.

Each Nexus Group chooses its own name to best fit the culture and identify of the sub-region. Further interest has been expressed to form Nexus Groups in the High Desert and Corona-Norco area.

Nexus Groups are designed to provide high-impact, nimble and local collaboration. Members are encouraged to bring their challenges to the monthly meetings and work side-by-side with committed experts and peers to solve their most challenging issues.

Out of these issues, Nexus Group members establish working committees that have strategic foci identified through group consensus and supported by the IHPC director and staff. ***The outcome is a stronger, more cohesive K-12 pipeline that connects to regional community colleges and universities, providing opportunities for underserved communities in the areas of education, career preparation and economic development.***

Because of positions held by the members of this group and their inherent decision-making ability, strategic pivots in licensing, certification and professional programs are accelerated and informed by real-time workforce gap/overage data.

Nexus groups have grown into an outstanding partnership, as evidenced by responses from interviewees and online survey participants.

- Cathy Martin, workforce policy vice president for the California Hospital Association: *“The most valuable part of the convening meetings were the networking opportunities.”*
- Online survey respondent: *“Sharing valuable resources regarding pipeline programs with the NEXUS meetings group has been extremely helpful to get news out to schools and other partners in the community. The NEXUS meetings have provided a platform for us to learn of what is going on around the community and share our programs as well.”*
- One interviewee who asked to remain anonymous noted: *“The biggest example again is the convening of people and bringing them together. At one of the meetings where everyone talked about the different programs that they were involved with, a clinical site mentioned they had health care management students which I*

Summary of the Nexus Groups Accomplishments (2015-17)

Increased knowledge of health-related pipelines and programs:

- State Seal of Biliteracy (SSB) Brochure
- “Homegrown” health workforce poster competition (8 videos, 120 students)
- Middle school exploration program (13 JUMP Clubs established)
- Career brochures for lesser known high demand health careers

Strengthened connections between community colleges and high schools:

- Directory and calendar of events promoting programs offered at colleges and universities
- Articulation agreements with Mt. SAC and Chaffey College

Increased teachers' knowledge of work-based learning and health pathway development:

- 3 HOSA trainings
- Teacher Resource Days
- 10 teacher externships

Enhanced communication between education and industry:

- Sub-regional Community Health Mixers
- Sub-regional Career Speaker Booklets of speakers from industry

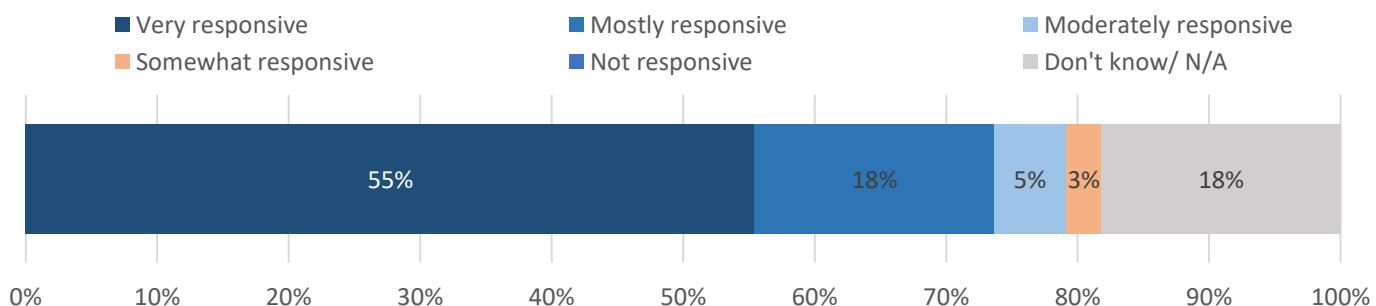
Improved student work readiness and career awareness:

- Mock Interview Program (90 students)
- Medical site visits (7 school to employer visits)
- Mentorship programs at high schools, with 7 mentors recruited and 50 high school students mentored
- Student Ambassador Program, with 7 ambassadors recruited from 7 colleges/schools
- Community Emergency Response Team Training (35 student participants)
- White Coat Spring Break Program, 40-hour field experience program (25 students)
- Public Health Seminars (180 students, 11 school districts)
- Mental Health First Aid Training (41 students)
- Sports Medicine Day (60 students)
- Makerspace Internships (2 students)

inquired for more information about. I was able to get connected with the program at Cal State San Bernardino and ask if they would like their students to come work in Behavioral Health. Since then, we have had CSUSB students ever since. I would have never heard of the health care management program and neither would the professor have heard of us if not for these meetings. At that time, they did not even think to include us in the outreach when trying to find internships for their students. It was because of the convenings that I found out about these programs."

To determine IHPC's capacity to coordinate efforts to strengthen regional health pipelines, the online survey asked participants to rate the organization's responsiveness to its networks. Overall, nearly 80% of survey participants regard IHPC as being responsive (Figure 5). More than half of respondents, 55%, identified the organization as very responsive and 18% said it was mostly responsive.

FIGURE 5 – RESPONSIVENESS OF THE IHPC ADMINISTRATION AND LEADERSHIP TO ITS NETWORKS (N=110)



Value of intermediary services

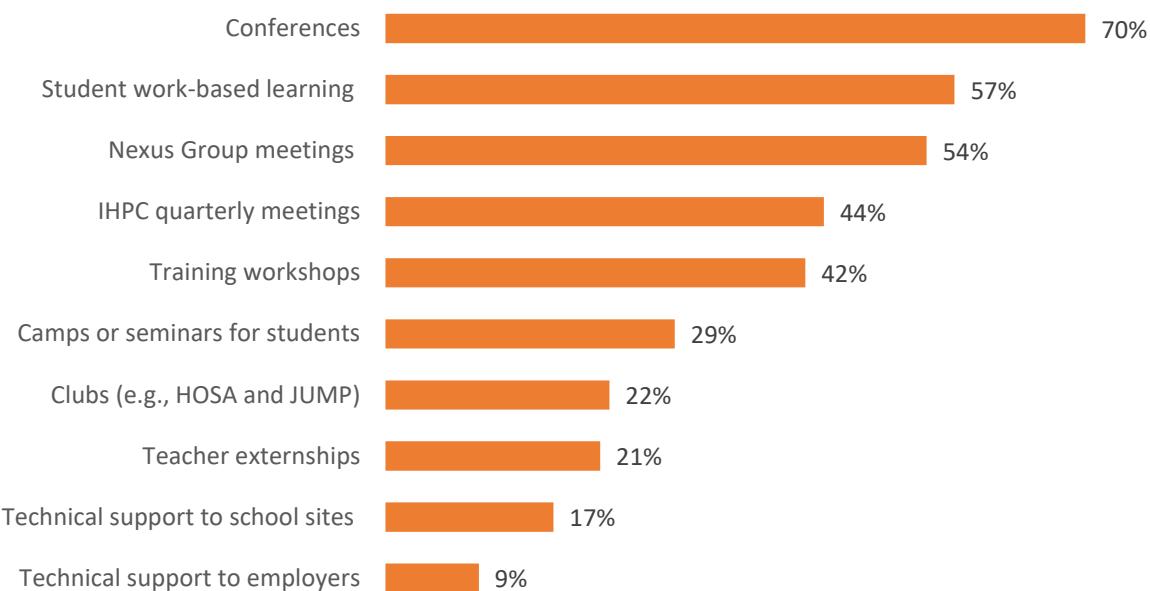
To determine whether IHPC has been effective in coordinating efforts to increase and diversify health pathways in the region, the evaluators identified key services offered by the organization:

- Conferences
- Student work-based learning
- Nexus Group meetings
- IHPC quarterly meetings
- Training workshops
- Camps or seminars for students
- Clubs (e.g., HOSA and JUMP)
- Teacher externships
- Technical support to school sites
- Technical support to employers

Questions about these services were then built into the online survey. The most frequently utilized services by IHPC stakeholders who participated in the survey were IHPC conferences, student work-based learning activities, and Nexus group meetings. The majority of respondents accessed these IHPC events/services (Figure 6).

These survey results confirm the value of IHPC's role in convening regional stakeholders. Conferences, student work-based learning and Nexus Group meetings top the list of services used by stakeholders. The least utilized services were technical support services to school sites (17%) and technical support to employers (9%).

FIGURE 6 – PERCENT OF RESPONDENTS UTILIZING COMMON IHPC SERVICES (N=107)
MULTIPLE RESPONSES WERE PERMITTED



Even though some of the IHPC services shown in Figure 6 are used less frequently than others, all services are regarded as valuable by stakeholders (Figure 7). On average, all services incorporated into the survey ranked above 4, meaning survey participants considered the service mostly valuable to very valuable on a 5-point scale. The highest ranked services were:

- Camps or seminars for students, 4.65;
- Training workshops, 4.62; and
- Technical support to school sites, 4.55.

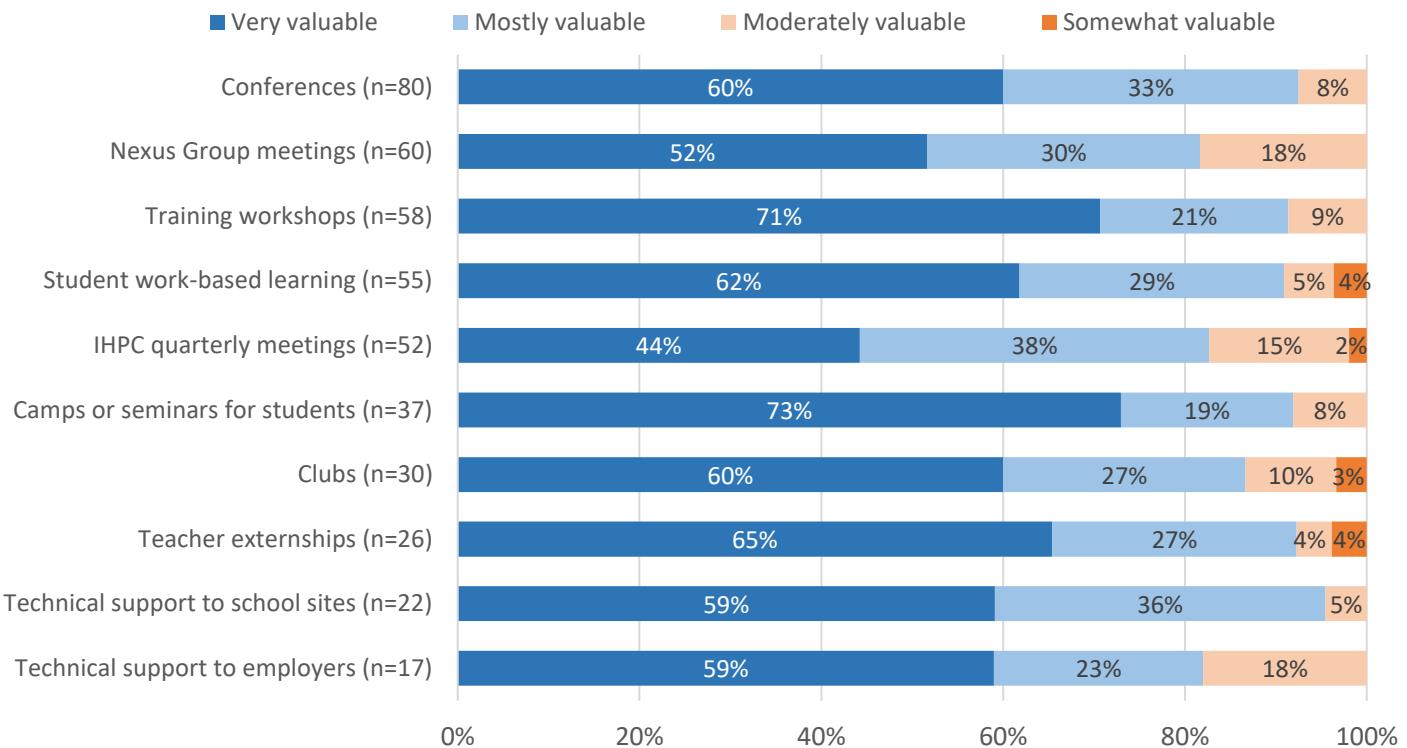
FIGURE 7 – HOW VALUABLE ARE THE IHPC SERVICES?

	Very valuable (5)	Mostly valuable (4)	Moderately valuable (3)	Somewhat valuable (2)	Not valuable (1)	Average rating
Training workshops (n=58)	41	12	5	0	0	4.62
Teacher externships (n=26)	17	7	1	1	0	4.54
Student work-based learning (n=55)	34	16	3	2	0	4.49
Conferences (n=80)	48	26	6	0	0	4.53
Technical support to school sites (n=22)	13	8	1	0	0	4.55
Nexus Group meetings (n=60)	31	18	11	0	0	4.33
IHPC quarterly meetings (n=52)	23	20	8	1	0	4.25
Camps or seminars for students (n=37)	27	7	3	0	0	4.65
Clubs (n=30)	18	8	3	1	0	4.43
Technical support to employers (n=17)	10	4	3	0	0	4.41

Overall, meetings received slightly lower ratings compared to professional development and work-based learning opportunities. Services receiving the lowest scores were IHPC quarterly meetings, 4.25, and Nexus Group meetings, 4.33.

While these scores are lower than the others, they still fall between very valuable and mostly valuable. Figure 7 provides frequency of responses on the value scale, while Figure 8 graphically displays the respondents' ratings.

FIGURE 8 - HOW VALUABLE ARE THE IHPC SERVICES?*



*Data Notes: Don't Know/Not Applicable responses were excluded from the analysis.

Assessment: Strategic Partnerships

Targeted Goals and Outcomes

IHPC builds strategic partnerships around health workforce pipelines. These strategic partnerships help achieve the following near-term to long-term outcomes.

Early outcomes:

- Articulation agreements are in place to facilitate transition to college (C1)
- Regional educational institutions expand health offerings & improve curriculum (C2)
- Employers provide more work-based learning opportunities for students using streamlined processes (D1)

Mid-term outcomes:

- More students transition to college-level health programs after high school (C3)
- Health care employers are eager to hire a local, diverse workforce (D2)

Long-term outcomes:

- Local jobs are filled with local workers (D3)

Activities and Interventions

In addition to the interventions described in the leadership and intermediary services that are naturally part of building strategic partnerships, IHPC conducted the following activities:

- 1) Resource development partnerships
- 2) Technical support to employers

Progress

To what extent has IHPC been able to engage a diverse range of stakeholders across all aspects of health professions development?

IHPC's partnerships with more than 63 K-12 schools in more than 17 school districts confirms the breadth of the organization's work to build a collaborative network in the region. The extensive list of industry, nonprofit and higher education partners in Appendix F also is evidence that the organization has been active in establishing and sustaining relationships with entities critical to strengthening health workforce pipelines in the region. **IHPC has gathered 24 higher education partners, 72 workforce partners and 25 partners in other areas, such as nonprofits, statewide health care organizations and governmental entities.**

Key partners include:

- Alliance for Education, San Bernardino County Superintendent of Schools
- California Hospital Association
- Los Angeles Area Chamber of Commerce
- Coachella Valley Economic Partnership
- California Primary Care Association
- San Bernardino County, Departments of Public Health and Behavioral Health
- Riverside University Health System
- California Wellness Foundation
- Blue Shield of California Foundation
- Office of Statewide Health Planning and Development (OSHPD)

Cathy Martin, vice president of workforce policy for the California Hospital Association noted IHPC's larger role in advocating for the region at the statewide level. She highlighted IHPC's participation in efforts by groups such as the California Health Workforce Alliance, California Health Policy Council and California Health Professions Consortium. As a result, IHPC's work is having a regional and a statewide impact.

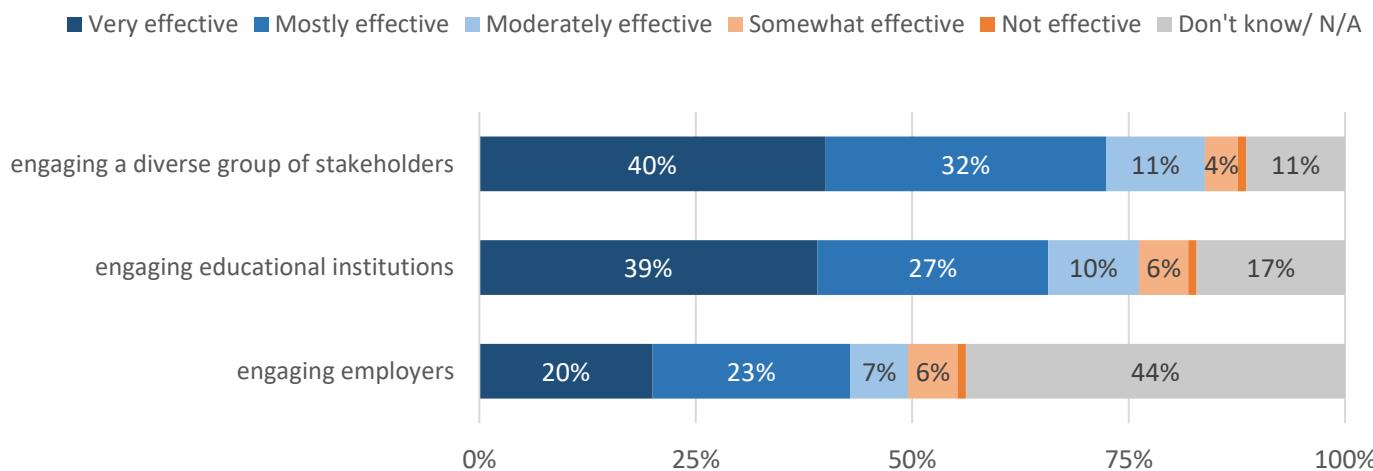
The frequency and consistency of the organization's Nexus Group meetings, quarterly meetings and conferences also attests to IHPC's ability to engage a diverse range of stakeholders across many health professions. The geographic variety of the Nexus Groups, which span three counties, also ensures that communities of all types, from rural to urban, and economically disadvantaged to affluent are engaged in pipeline development.

Feedback gathered from interviewees and online survey participants indicate more workforce connections are desired by stakeholders. (Please refer to Appendix G for detailed write-in responses on areas to improve and Appendix H for additional recommendations provided by online survey participants.) Educational providers interviewed by phone mainly cited Loma Linda as a beneficial workforce partner providing work-based learning opportunities. Fostering more connections across the educational community also is desired.

In the online survey, IHPC was rated most highly for engaging a diverse group of stakeholders, followed by engaging educational institutions (Figure 9). This rating is mirrored in the quantitative analysis of the number of stakeholders and the variety of affiliations documented in the previous section, Assessment: Leadership and Intermediary Services.

However, analysis of online survey results also shows the organization received the lowest ratings for engaging employers.

FIGURE 9 – RATING OF IHPC EFFECTIVENESS IN PARTNERSHIP EFFORTS (N=105)



The low rating for engaging employers seems to have been mirrored in comments in interviews and online write-in responses, which requested more opportunities for students and teachers to engage with employers.

Marie Sliney, an instructor with Baldy View ROP who spoke very highly of IHPC overall, commented, “*I don't feel the connections have gone as far as I would like them to. ... I've been introduced to people at different educational facilities and gotten some resources. I have made some good connections with Loma Linda, but that's pretty much it.*”

Write-in responses on areas to improve included requests for more internships, work-based learning opportunities and externships:

- “*I think the development of more sites for our high school students to do a job shadow and/or internship.*”
- “*The key is to get more employers to provide work based learning experiences, paid work experiences through WIOA youth funding and paid internships.*”
- “*More involvement from health professionals.*”
- “*More connections and opportunities for community college students and career explorations and health career experience and exposure.*”
- “*As an instructor my students would benefit greatly with more opportunities for externship sites.*”
- “*Increase in Internship sites.*”
- “*Perhaps, include externship and/or volunteer opportunities to adult students who are in the Health Care Pathways?*”
- “*As many externships internships and partnerships as possible...*”

Based on the following employer write-in response, and anecdotes from those interviewed on the obstacles preventing the development of more opportunities, it is clear IHPC faces many hurdles in building employer relationships and should be applauded for building relationships in areas where individual schools and districts have previously failed or encountered difficulties. This comment illustrates one challenge in attracting employers to participate in work-based learning and other related activities:

“IHPC seems to offer a lot of benefit to the educational system, and to students, but not much benefit to the health system. We are asked to provide site visits, shadowing opportunities, career speakers, etc., but we do not see return on our investment.”

Convincing employers that they do benefit in the long term appears to be challenge, and is cited in interviews as one of the reasons many schools have been unable to secure employer partnerships. Despite these obstacles, IHPC has made notable progress in this area:

- IHPC offered 50 student internships during the 2016-17 academic year, compared to 19 in the 2015-16 academic year.

- IHPC also formed 39 MOUs with new health partners in the 2016-17 academic year.
- During the 2015-16 academic year, 211 students attended health site visits.
- The number of students participating in job shadowing increased from 24 in the 2015-16 academic year to 51 in the 2016-17 academic year.

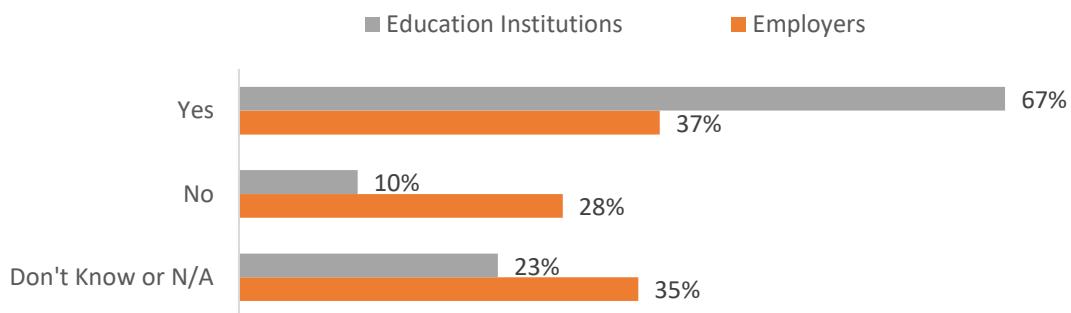
Christine Thomas, special projects and grant liaison with Baldy View ROP, noted in her interview:

"These are doors we were not able to open on our own. Kaiser Hospital, wouldn't touch any high school with a ten-foot pole; yet the organization [IHPC] has found a way to open those doors and get those opportunities extended to us."

The evaluation team also sought to determine the efficacy of IHPC in building regional connections. The online survey asked participants whether IHPC had assisted them in making new partnerships.

IHPC's efficacy in helping partners make new connections was confirmed by the online survey. Nearly 70% of education respondents said IHPC had helped them make new connections. Likewise, the enthusiasm and commitment of IHPC's staff to help constituents build relationships is valued by partners, as documented by evaluators in phone interviews.

FIGURE 10 – HAS IHPC HELPED YOU MAKE NEW CONNECTIONS WITH THE FOLLOWING GROUPS? (N=106)



How has IHPC been engaged in helping communities across the Inland region leverage resources through strategic partnerships?

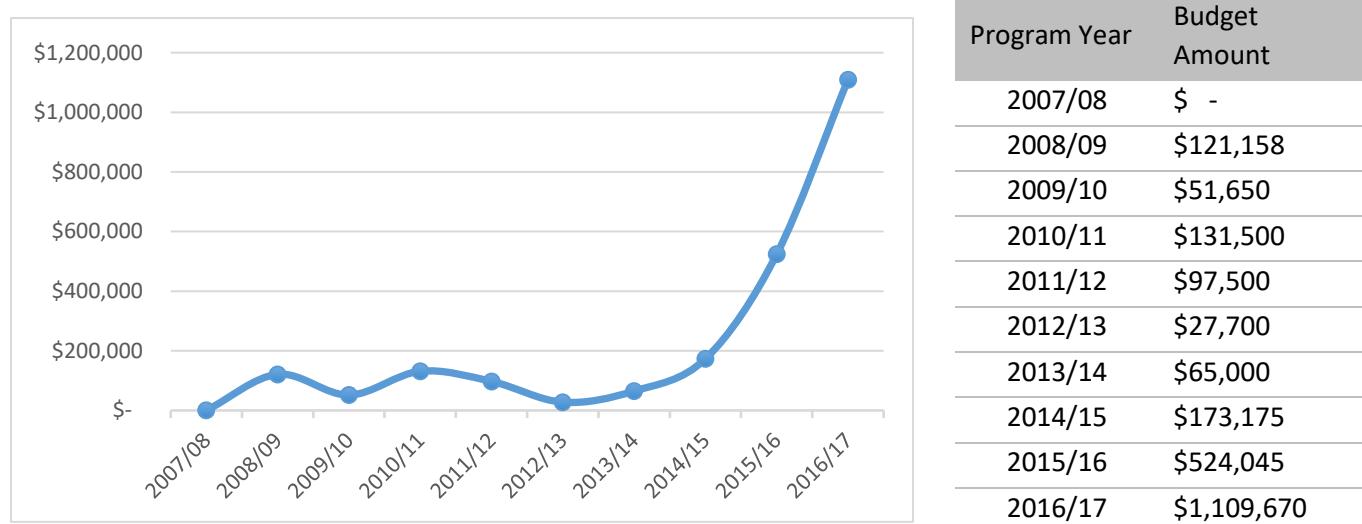
IHPC's foundation is based on the premise that no single organization or academic institution in a region as large as the Inland Empire can effectively address the challenges that arise from diversifying health career pathways. A major function of the organization is to enhance and facilitate ways for different systems to work together, and to advance health pathways through structured opportunities for discussion and knowledge exchange.

One of the ways IHPC has helped stakeholders in the Inland Empire leverage resources is through its role as a regional convener. The monthly Nexus meetings provide a forum to assess resources, agree on desired outcomes, develop and implement new strategies, and evaluate the efficacy of past work. This

process fundamentally leverages scarce resources, namely the limited time of stakeholders and the limited funding of school districts, to achieve ambitious outcomes.

Leveraging resources is a basic principle of educational grants. IHPC's efficacy in leveraging resources through strategic partnerships can be documented through its participation in grants secured by its partners and by its own success in winning grants. Grant funding is often viewed as an indicator of an organization's overall effectiveness, sustainability, strategic abilities and community engagement. IHPC's budget has been largely funded by grants and donations from more than 50 major organizations. The overall budget has increased from \$121,158 in 2007-08 to \$1.1 million in 2016-17 (Figure 11).

FIGURE 11 – ANNUAL IHPC BUDGET, 2007-2017



IHPC Funders and Sponsors, 2007-2017:

- AltaMed
- American Career College
- Arrowhead Regional Medical Center
- Azusa Pacific University
- Baldy View Regional Occupational Program
- California Baptist University
- California Primary Care Association
- California State University, San Bernardino
- Center for Community Change
- Chaffey Joint Union High School District
- Chino Valley Medical Center
- City of Murrieta
- Claremont Colleges
- College of the Desert (Desert Community College District)
- Kaiser Permanente
- Lake Elsinore Unified School District
- Loma Linda University
- Molina Healthcare
- Moreno Valley College
- Moreno Valley Unified School District
- Mt. San Antonio College
- Office of Statewide Health Planning & Development
- Parkview Community Hospital
- Pomona Valley Hospital Medical Center
- Rialto Unified School District
- Riverside Community College District
- Riverside Community Hospital
- Riverside University Health System
- San Antonio Regional Hospital

- Community Health Association Inland Southern Region
- Corona-Norco Unified School District
- County of Riverside Board of Supervisors
- Dignity Health
- EMS Management
- Epic Management
- Fenton Communications
- Fontana Unified School District
- Golden West College
- Grand Canyon University
- Health Workforce Initiative
- Inland Empire Health Plan
- San Bernardino Community College District
- San Bernardino County Department of Public Health
- San Bernardino County Medical Society
- San Bernardino County Superintendent of Schools
- San Bernardino County Workforce Development Department
- San Gorgonio Memorial Hospital
- The California Endowment
- The California Wellness Foundation
- University of La Verne
- Victor Valley College

What efficiencies have resulted from the establishment of IHPC's strategic partnerships?

The efficiencies resulting from IHPC's strategic partnerships can be best summarized through the relationship of:

- New linkages,
- Enhanced communication, and
- Improved and expanded service delivery.

New linkages and enhanced communication between education providers and industry have resulted primarily through IHPC's role as a regional convener.

“Because of barriers, we don’t talk to each other,” said Christina Bivona-Tellez, assistant professor at Azusa Pacific University School of Nursing. *“IHPC has been a critical part in helping to bring together multiple organizations to discuss issues and solve problems that impact the region.”*

Several interviewees noted the Convergence has been important in this area as well. For example, James Hattar, community recruiter for Colton, Redlands, Yucaipa ROP (CRY-ROP), identified the Convergence as facilitating important strategic partnerships, because it brings together colleges and health care providers, such as Loma Linda University Medical Center, the Red Cross and Western University of Health Sciences in Pomona. *“A lot of school districts want to get their students involved with the hospitals, and sometimes it is very competitive. With the Convergence, getting those opportunities available to all areas is a pretty big deal,”* he said.

IHPC's newsletters and website serve as a clearinghouse for professional development student work-based learning opportunities in the region. Being a one-stop-shop, so to speak, provides an efficient means for educators to stay apprised of events related to health pathway development and a means for them to connect their students with meaningful experiences.

Those interviewed for this report spoke highly of IHPC's effectiveness in getting out the word about opportunities for students. The newsletter was praised as a great resource for instructors. Sending out fliers about scholarships for students is also valued and helps target underserved student populations.

“They are exceptionally good about letting us know about every opportunity there is for students, including weekend seminars they can go to find out about nursing, physician assistant,” said Marie Sliney, an instructor with Baldy View ROP. “They do an excellent job with letting us know about resource days and conferences for students.”

Nexus meetings have played a pivotal role in this, even though these meetings did not receive the highest ratings compared to other services within the online survey.

The networking opportunities provided through these meetings were frequently cited by interviewees as a top benefit/outcome. New linkages have directly resulted in improved and expanded service delivery offered by IHPC, such as the establishment of student work-based experiences, internships, teacher externships and summer camps.

In her interview, Christine Thomas, special projects and grant liaison with Baldy View ROP, explained why the new linkages through Nexus meetings are so critical to strengthening health care pathways:

“We have educators at all levels, and people from industry, a lot of them are supervisory or in a position to hire which is even more meaningful. We are able to get a take on what it is these industry folks are looking for in who they are going to hire. Once we have that line of communication, it helps us to better prepare our students.”

At the macro level, Nexus meetings ensure stakeholders are appropriately engaged in strategic planning, thereby enhancing communication and facilitating the efficient use of resources and interventions which otherwise might not be possible in such a vast geographic region.

Lenny Pepper, vice president of special programs and projects at Borrego Health Foundation, summarized the importance of collaboration through Nexus meetings in the following way:

“The monthly group meetings are very effective. The format of monthly meeting with stakeholders involves putting together strategic plans and setting up comprehensive goals that are acceptable for everyone at the table. Having these institutions—schools and businesses—continue to buy in to promote and meet these goals throughout the year is where IHPC does the grass roots grunt work to make the vision come to life. They keep everyone on task on what that strategic vision is for the year.”

This type of sustained stakeholder engagement is critical for the continued expansion of employer participation in the health pathways, particularly for internships and work-based learning opportunities.

IHPC should be lauded for facilitating the much-needed connections between employers and educational programs serving students. Furthermore, because the region is so vast and has such a large population, totaling more than 4 million, IHPC brings unique know-how to the table because its staff

“The number one value IHPC brings is growing a diverse health workforce and keeping students in the region. ...Their local community is their greatest asset.”

— Cathy Martin,
vice president of workforce policy,
California Hospital Association

members understand the overall regional infrastructure, how to provide effective interventions and the most efficient ways to connect students with health careers opportunities within the existing infrastructure.



Assessment: Workforce Pathway Collaboration & Programs

Targeted Goals and Outcomes

Early Outcomes:

- Teachers use improved methods to deliver health curriculum (B1)
- Teachers are aware of health careers and opportunities for students (B2)
- Underrepresented students participate in internship and other work-based learning opportunities (B3)
- Articulation agreements are in place to facilitate transition to college (C1)
- Regional educational institutions expand health offerings and improve curriculum (C2)

Mid-term Outcomes:

- Quality of instruction improves (B4)
- Diverse students are aware of and excited about health careers; they feel like they belong to community of learners (B5)
- More students transition to college-level health programs after high school (C3)

Long-term Outcomes:

- Health workforce pipelines are diverse, competent and local (B6)
- Local jobs are filled with local workers (D3)

Activities and Interventions

IHPC has engaged in building health career pathways in the Inland region since its inception in 2007. Based on conversations with industry partners and review of labor market data of in-demand occupations, areas of focus were determined. IHPC designed interventions and activities to address these areas of need using strategic partnerships, intermediation and open dialogue as the main approaches:

- 1) Conferences and convenings for various audiences
- 2) Professional development for teachers (including training workshops and externships)
- 3) Work-based learning opportunities for students (such as internships, career speakers, student clubs, seminars and camps)
- 4) Technical support to school sites

Progress

To what extent has IHPC built the capacity of partnering organizations to strengthen health workforce pathways?

IHPC regards connections between employers and educators as a critical link required to build strong workforce pathways. As a result, efforts have been undertaken to expand the capacity of both employers and educational institutions to work on pathways. The extent of these efforts is demonstrated by online survey responses as well as interviews.

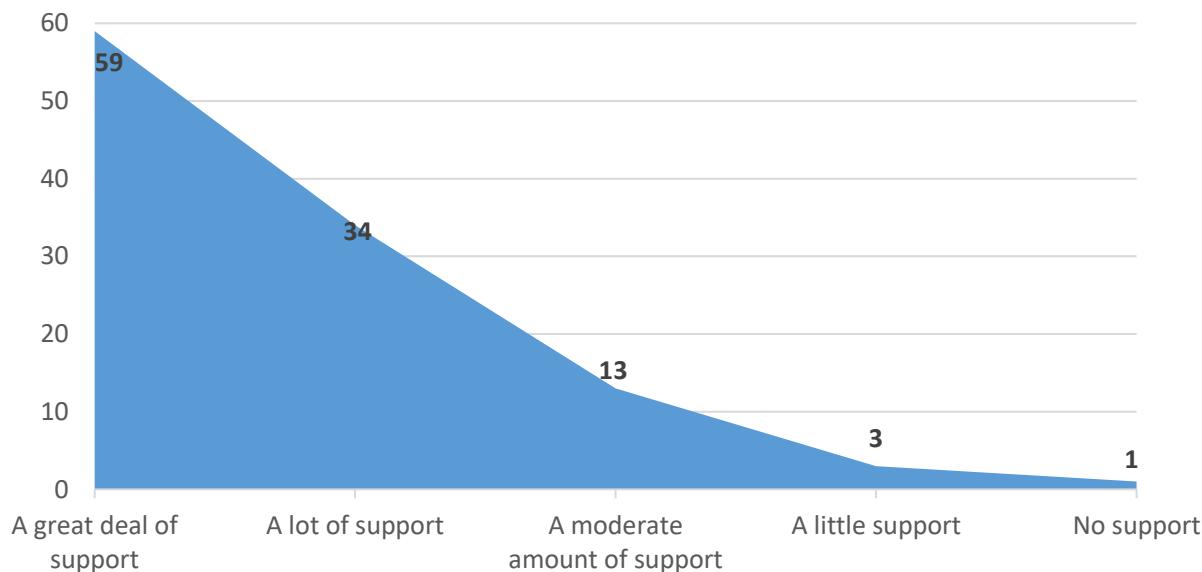
“Without IHPC, there is no community involvement because businesses do not have time to do it,” said Lenny Pepper, vice president of special programs and projects at Borrego Health Foundation. “They are the organization that can handle the nuts and bolts in moving the program forward.”

Other forms of evidence of expanded capacity due to IHPC efforts include the following examples:

- Baldy View ROP developed externships for teachers and internships for students.
- Norco College secured a \$12.8 million Career Technical Education Pathways Grant in 2015.

The efficacy of IHPC's work to expand capacity is reflected in the high rating IHPC received in the online survey for its support of the region's health professions pipelines, with 85% of respondents reporting that they experienced "a lot/a great deal of support" (Figure 11). While there is no documentation on student and employer-level outcomes of the conducted interventions, the overall rating of the IHPC progress in fostering health professions pipelines is very high, with almost half of all respondents providing the highest possible rating.

FIGURE 11 – RATING FREQUENCIES OF IHPC'S SUPPORT TO THE REGION'S HEALTH PROFESSIONS PIPELINES (N=110)



To what extent have IHPC efforts strengthened health professions pathways in the region?

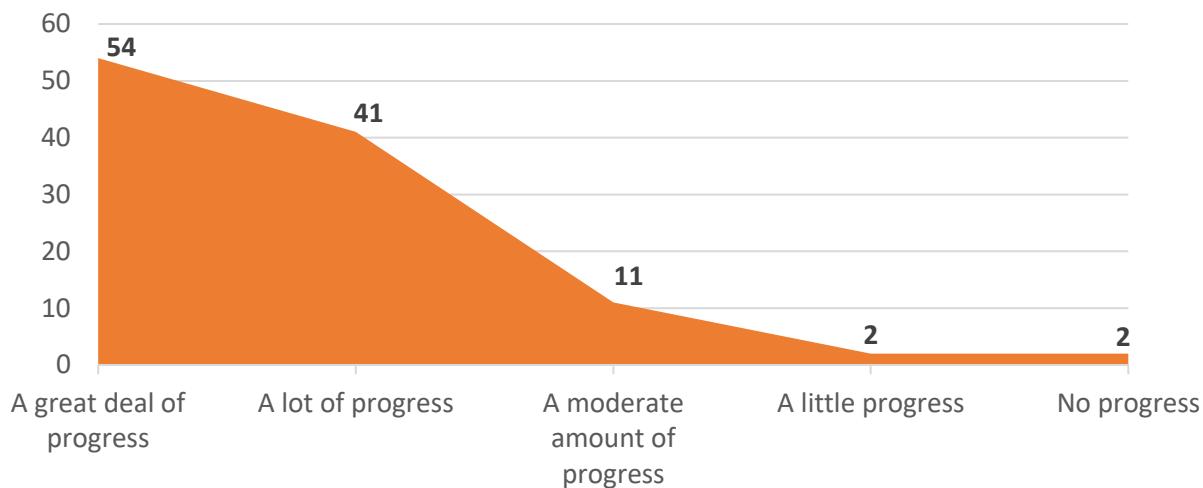
The number of pathways the organization is working on has expanded significantly within the last 10 years. Currently, IHPC targets the following occupational groups:

- Primary care professions,
- Allied health professions,
- Emergency medical professions,
- Public health professions,
- Behavioral and mental health professions,
- Dental professions, and
- Other health professions.

Data tracking of student progress through pathways is difficult to conduct due to the differences in data collection between K-12 school districts and higher education institutions. However, the evaluation included two online survey questions geared toward determining IHPC's impact on pipelines in the region.

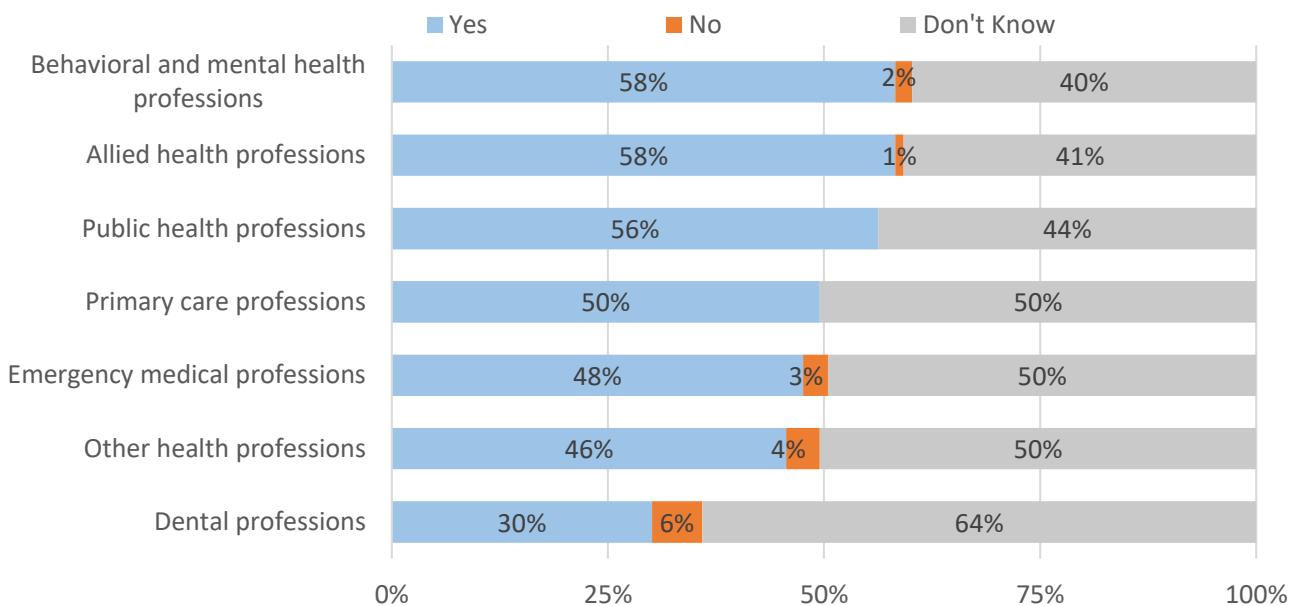
Survey respondents were asked to rate IHPC's progress in fostering health professions pathways in the region over the last 10 years (Figure 12). Half said the organization has made "a great deal of progress," and nearly 40% said the organization has made "a lot of progress."

FIGURE 12 – RATING FREQUENCIES OF IHPC'S PROGRESS IN FOSTERING HEALTH PROFESSIONS PIPELINES IN THE REGION IN THE LAST TEN YEARS (N=110)



The study also sought to gauge improvements in specific health professions (Figure 13). Occupations that survey participants felt had been most positively impacted include:

- Behavioral and mental health professions,
- Allied health professions, and
- Public health professions.

FIGURE 13 – HAVE IHPC EFFORTS POSITIVELY AFFECTED THE FOLLOWING PROFESSIONS? (N=103)

To what extent has IHPC been able to disseminate promising or best practice models for health workforce pathway programs?

Conferences and Convenings

In earlier years of its existence (during the 2007-2013), IHPC hosted four major conferences involving over 1,100 health professionals, educators, career counselors and high school students. With time, conferences evolved and attracted more attendees providing the platform for raising awareness of the health workforce issues in the region and building collaborative solutions to the challenges identified.

During the 2016-17 academic year, there were 1,865 participants in IHPC events, not including the annual Health Professions Conference.

Meanwhile, attendance of the annual Health Professions Conference has grown steadily over the years, and skyrocketed over the past year. In 2015-16, 445 students attended the conference compared to 874 in 2016-17.

During the past 10 years, IHPC conducted the following major conference or convening events:

- K-12 Strategies and Solutions Conference: Cultivating Future Health Care Leaders (2008)
- Health Career Pipeline Conference for Counselors (2009)
- Annual Health Professions Conference for High School Students (2010-2017)
- The Building Primary Care Capacity in the Inland Empire Regional Convening (2013)
- National Innovative Communities (NIC) Conference: Health Professions Track (2016, 2017)

Many of these events were conducted in close collaboration with industry, colleges, universities and high school partners. The target audiences varied from high school students to counselors and education partners. (Appendix I provides details of key conferences conducted by IHPC.)

Conferences are regarded as highly beneficial in the interviews. According to the interview comments, the most recently conducted 2017 Health Professions Conference provided opportunities for educators to learn about many resources that can be utilized in programs and to make connections with people at other schools to share ideas and collaborate. Health care employers were engaged at many levels as speakers, vendors and learning partners.

General reported outcomes of the conferences and convenings across all stakeholders include:

- Expanded networks of educational partners, employers, funders and community/intermediary organizations;
- Gained knowledge of possible services and programs;
- Gained knowledge of the community and its needs;
- Gained understanding of the needs of the region and subsequent action planning and program implementation by IHPC and its partners; and
- Improved connections between K-12 and community colleges and enhanced pipeline work. (IHPC has engaged with the community colleges over the past years through articulation efforts, nursing pipeline efforts, participation in the Health Workforce Initiative, and most recently participation in the Strong Workforce Initiative.)

Some of the learning outcomes for students attending the conferences included:

- Awareness of the spectrum of existing and emerging health occupations and career opportunities;
- Awareness of related training programs, as well as volunteer and internship opportunities; and
- Understanding of program and/or college admission requirements, including steps to take for successful admissions.

K-20 teachers and educational administrators gained knowledge of:

- Best practices in the education and training of pre-health professionals;
- Funding opportunities for the support and expansion of current health career pipeline programs;
- Vertical partners for the articulation of their health career programs within their school districts, and with community college and university partners; and
- Lateral health care industry partners for job shadowing and student internship placement opportunities.

Health care industry employers and community agency partners learned about:

- Lateral K-20 educational partners for shared and expanded workforce training opportunities;
- Best practices in the education and training of pre-health professionals, including student volunteer and internship placements; and
- Funding opportunities for the support and expansion of current health career pipeline programs.

Using the information obtained and the networks developed at these events, IHPC developed and implemented strategies to address identified gaps. As a result, the following outcomes were achieved:

1. Initially, work-based learning wasn't recognized as an important component of pipeline building and improving student success. IHPC provided support for K-12 districts to be able to access the broad learning base of experienced, successful programs within the Inland Empire and across the state. Currently, most schools are aware of the importance of work-based learning. The number of health academies in the region grew from three in 2008 to 15 in 2017.
2. Pipeline programs, stakeholders and communities moved from a focus on individual, programmatic efforts towards a community-wide focus on systemic change.
3. The Inland Empire and Pomona Valley needed a vehicle to coordinate the development of resources, to provide time and space to form strategic alliances, and develop a network of support for the K-12 sector. IHPC is currently recognized as the regional convener for all conversations related to health pipelines.

Many important initiatives were launched following the conferences and convenings. The following are some of the initiatives and their outcomes:

- **San Bernardino Countywide Vision** – IHPC was selected by a vote to implement pipeline efforts and ensure alignment and high-level support, such as support from the County CEO's office, as well as major health plans, economic development agencies, hospitals and universities. This initiative later transformed into the Community Vital Signs initiative of San Bernardino County.
- **Linked Learning Initiative** – Through IHPC's efforts, all five school districts participating in the initiative have chosen health professions as one of their career pathways programs. This initiative was funded through the James Irvine Foundation.
- **Nexus Groups** – A need was identified for more sub-regional Nexus Groups in the Riverside metropolitan area and in the Pomona Valley/West End Area. These groups were formed and are operational.
- **The San Bernardino County Medical Society Internship Programs** – IHPC provided technical assistance to remove barriers between clinical settings and high school students to provide job shadowing and internship placements.

Professional Development for Teachers

Another area of high impact that IHPC has focused on is professional development for teachers. Interventions include training workshops and industry externships.

- **Work-Based Learning Institutes**—These four-day training workshops are organized once a year to equip teachers with strategies for providing work-based learning opportunities to students.
- **Teacher Resource Days**—IHPC hosts a Teacher Resource Day each year at the beginning of the school year. The purpose is to provide teachers, counselors and administrators free resources to enhance their health pipeline programs. Some of the resources are developed by IHPC, while others are garnered from external sources that teachers may not have had time to explore. IHPC also presents information on current data and trends in the health care sector. Teacher

Resource Day was so popular that IHPC decided to offer two Teacher Resources Days in 2017.

- **Teacher Externships**—Externships motivate, educate and inspire health pathway educators and counselors to integrate current industry trends into their curriculum and their daily interactions with students interested in health careers. The externship program exposes educators to a variety of health careers, business practices and teaching strategies in a wide array of health-related settings, including hospitals, clinical sites, public health departments, mental health settings and outpatient care facilities.

Recent performance measures related to professional development are shown in Figure 14.

FIGURE 14 – PROFESSIONAL DEVELOPMENT PERFORMANCE MEASURES

Activity	2016-17
# of teacher externships	7
# of tool kits created	4
# of teachers/counselors attending Teacher Resource Day	63
# of teachers trained through the Work-Based Learning Institute	32

Training workshops for teachers were considered very valuable by survey participants. Teacher Resource Day participants appreciate the information gained and exposure to resources, and want more. For example, the most valuable resources from the 2014 Teacher Resource Day were service learning, soft skills, scholarship information and the speakers' bureau. At that time, the Teacher Resource Day evaluation identified a need for more resources in Riverside County, as well as more partners and more representatives from the workforce.

When interviewed, Christine Thomas, special projects and grant liaison with Baldy View ROP commented, *“The first big experience that shaped my opinion of the organization was the Teacher Resource Day that I attended. There were a lot of resources available for teachers for work based-learning opportunities related to medical students.”*

Externships are particularly valuable for educators in a career academy, pathway or career technical education program because they allow classroom teachers and counselors to experience the world of work for which they are preparing their students. As a result of this real-time, real-world industry connection, educators:

- Acquire hands-on experience from industry professionals which increases their technical skills.
- Gain knowledge of current industry standards and how those relate to their classroom curriculum.
- Develop integrated lesson plans that incorporate career technical education elements with core academic subjects.

- Expand their network of industry contacts resulting in more industry site partners for student job shadowing and internship experiences, classroom speakers and industry references.

Industry partners also benefit from the externship experience because they can directly link to a pipeline of the next generation of workers; as a result, they can have a voice in what these students learn and how they are taught. Business partners have the ability to help shape curriculum, build relationships with students, parents and educators, and enhance their early recruiting of future employees.

Marie Sliney, an instructor with Baldy View ROP, confirmed the value of externships in her interview, *“I did a teacher externship last year at Loma Linda, which I thought was an invaluable experience. It gave me an opportunity to go into an area I never would have had the opportunity to be in had they not been able to facilitate it, and I was able to bring back information to my students on proton therapy.”*

Work-based Learning and Other Services for Students

IHPC conducts activities that involve interventions for students. Most of these activities are centered on providing meaningful career exploration experiences through work-based learning opportunities—internships, seminars, camps and others. The work-based learning opportunities (such as internships, student field experiences and site visits) are viewed as directly linking educators and students with employers. **Aside from facilitating communication across diverse stakeholders, internships were the most commonly cited beneficial service offered by IHPC.**

Internships: The objective of IHPC internships is to provide students with hands-on experience in health settings. IHPC has made it a priority to develop nontraditional internship settings, as well as to standardize internship expectations across the region. This work has led to the creation of the Inland Empire Student Health Ambassador (IESHA) program, recently funded by Kaiser, as well as other innovative relationships with public health and care facilities for developmentally disabled adults, all of which have been very successful; however, there is still a great need for more placements as the field grows.

- *“Providing internships and other opportunities is crucial for students to become more empowered and know what is possible,”* said Christina Bivona-Tellez, assistant professor at Azusa Pacific University School of Nursing.
- *“The biggest value is definitely the high quality and reasonably priced opportunities for students to explore career interests and gain and practice real life and academic skills,”* said one interviewee who asked to remain anonymous.
- *“The Inland Coalition has been instrumental in ensuring that the diverse groups of interns are placed with health sector employers,”* said Patricia Etem, Southern California regional manager for Health Career Connection.
- *“Exposing kids to the variety of different careers in health has been phenomenal,”* said Wendy Zinn, CTE community collaborative manager at the San Bernardino Community College District.

Mock interviews are another work-based learning experience considered beneficial by IHPC constituents:

"I would recommend opportunities like the interview skills sessions to other employers to get a sense of who is coming up in a couple of years as the potential workforce. These are the opportunities to plant seeds with employers with potentials matches from the region. It gives businesses the opportunities to improve the regional workforce," said Lenny Pepper, vice president of special programs and projects at Borrego Health Foundation.

In the 2015-16 academic year, 153 mock interviews with students were conducted. This number increased to 193 in the 2016-17 academic year.

Outreach to students is also a critical component of the services offered by IHPC:

"At the K-12 level, with their ability to spread knowledge, it would assist students wanting to go into those pathways. Just allowing our students to know there are opportunities out there is more than enough," said Wendy Zinn, CTE Community Collaborative manager at the San Bernardino Community College District.

Camps, Clubs and Seminars: IHPC exposes students to different occupations in health care using seminars, training workshops, clubs and camps. Some examples include:

- **Exploring Health Careers** was offered one day per week as part of the larger Healthy Teens program in 2007. Many youths have never been exposed to different occupations in health care.
- **The 911 Emergency Careers Bootcamp** was held in July 2015. This experiential camp program was offered through a joint effort by IHPC, the Latino Health Collaborative and the Health Workforce Initiative. The program aims to encourage students to consider future careers in the emergency medical field. Over five days, students are exposed to careers such as nursing, EMTs, firefighting and others. There were 33 participants comprising high school students enrolled in San Bernardino City Unified School District and Rialto Unified School District.
- **The Get Psyched! Future Mental Health Professionals Seminar** was held in July 2015 and June 2017. The three-day seminar helped incoming high school juniors and seniors gain a better understanding of careers in the field of mental health. The seminar was conducted in partnership with the Riverside University Health System-Behavioral Health and the San Bernardino County Department of Behavioral Health. Forty-two students registered; 37 attended at least one day of the seminar, and 25 attended all three days of the seminar; eight internships were provided. It is clear from the evaluation that the seminar was effective in broadening awareness of mental health careers, the education required to enter those careers, the financial issues that might be a barrier to education, and why it is important to have a diverse health workforce.
- **The Youth Advocates for Health Access (YAH)** is a student club that trains 55 youth, ages 16-24, on community health promotion, access to health services and appropriate utilization of health services, with a focus on reaching the remaining uninsured residents of the Inland region.

(Appendix C lists and defines many work-based learning activities conducted by IHPC over the last 10 years.)

Technical Support to School Sites

In addition to professional development activities and services for students, IHPC has strengthened career pathways through technical assistance services provided to educational institutions. For example, it has contributed to several efforts targeting more articulation agreements between K-12 school districts and colleges.

One such initiative that was found valuable by a survey respondent was the Nurse Pipeline Development project with San Bernardino Valley College, San Bernardino City Unified School District and local ROPs. Local students received preference to be accepted into San Bernardino Valley College's nursing program.

Another example is the Career Speakers Bureau, which became a valuable resource for teachers. As part of this project, IHPC created booklets with names of subject matter experts from the industry willing to visit classrooms and present on careers. As of the 2015-16 academic year, there were 350 health professionals affiliated with the Career Speakers Bureau.

To what extent has IHPC been able to increase diversity in health pathways?

IHPC strives to support a health workforce that is reflective of the local population and meets the health needs of the Inland region's residents. Employers realize the need for a diverse workforce as well. However, due to many barriers, stakeholders in the Inland Empire have struggled to create pipelines that are equitable across economic and demographic populations.

IHPC's director and staff should be applauded for upholding accountability within the organization and seeking continuous improvement in the area of workforce diversity. For example, Christine Thomas, special projects and grant liaison with Baldy View ROP, described collaborating with IHPC, noting, *"They report out on how successful they were with what they were contracted on. They are very good at that. Their self-evaluation is ongoing."*

One of the organization's biggest successes has been in linking employers with educational providers to work together on diversity issues affecting the health workforce in the region.

In addition, the following efforts have spurred progress in diversity:

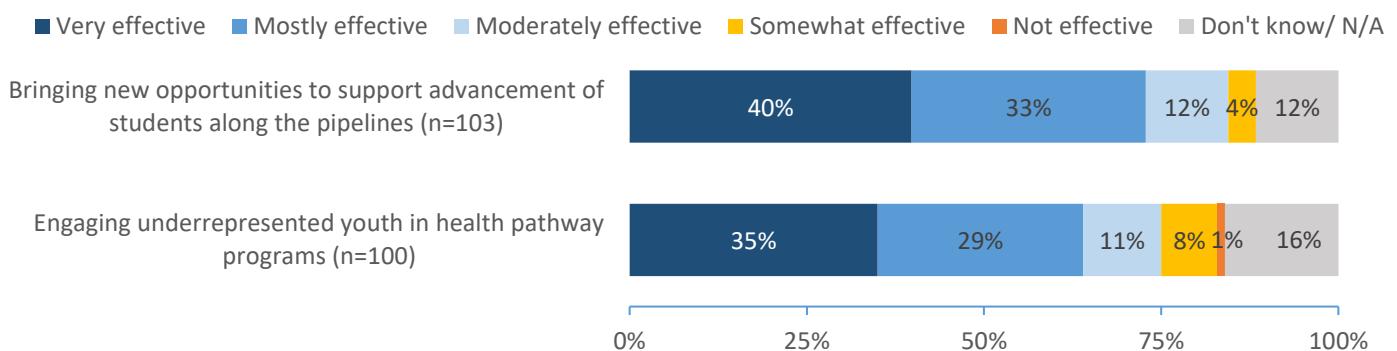
- **Serving as an internship liaison for employers and as a clearinghouse for educators**—This effort by IHPC makes internships available to students in low-income areas who may not typically have access to these types of work-based learning opportunities. It is very competitive to get students into opportunities inside a hospital, and school districts are competing for these opportunities; having IHPC as an intermediary fielding student applications and connecting students to the internships alleviates the competition among school districts, and reduces the burden on employers to select which school to work with. Furthermore, IHPC has consistently expanded opportunities by helping to develop new internships.
- **Facilitating internships and communications** between regional employers and educational providers are a valued asset, advancing progress toward increasing and diversifying the workforce pipeline. The fact that students do not need a 4.0 GPA to do an internship is also a strength of IHPC's collaboration with the regional workforce. This is viewed as a positive benefit

because it opens up internships to a broader range of students, namely underserved, underrepresented students, which ultimately helps improve diversity in the workforce. IHPC's partnerships with employers also appears to be leading to enhanced services for students. For example, in the 2016-17 academic year, health professions speakers made 115 classroom visits.

- **The Health Occupation Scholarship (HOT) fund** was established for eligible students through the Workforce Innovation and Opportunity Act (WIOA) to supplement occupational training funds for at-risk youth. Over \$10,000 has been raised through various events and donations. Three scholarships have been awarded so far.
- **Camps and student activities**—Overall, IHPC has expanded the number of programs available to students and teachers over the past 10 years. In the 2015-16 academic year, IHPC added six new programs, specifically YAHA, 911 Camp, Get Psyched!, HEAL Mentors, IESHA and the Riverside Nexus Group. In the 2016-17 academic year, it launched an additional 23 programs, including the HOT (WIOA) Program, 13 new JUMP clubs and the JUMP Spring Showdown, which had 300 attendees. *“Providing more opportunities through these summer activities or camps is a big deal. That’s a positive thing, and the fact that they provide networking for education and business professionals to get together and hear what they have to say and provide a bridge for students to have more opportunities,”* said James Hattar, community recruiter for CRY-ROP.

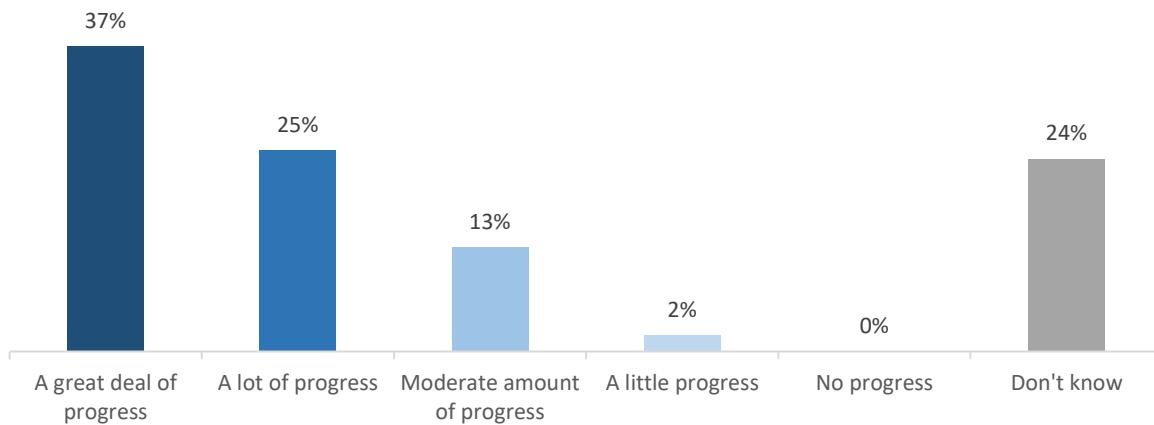
Survey respondents generally confirm that the IHPC has been effective in bringing new opportunities to support the advancement of students along the pipeline, with 73% responding “very effective” or “mostly effective” (Figure 15). The majority of the respondents, 64%, also reported the organization has been effective in engaging underrepresented youth in health pathway programs. However, 16% of respondents are reporting, “I don’t know.”

**FIGURE 15 – EFFECTIVENESS OF IHPC’S WORK IN SUPPORTING HEALTH PIPELINES,
RELATIVE RESPONSE FREQUENCIES**



The online survey also asked respondents about the progress IHPC has made in increasing diversity in health pipelines (Figure 16). A large proportion of survey participants believe IHPC has made progress, 64%. “A great deal of progress” was selected by 37% of respondents, and 25% selected “a lot of progress.”

**FIGURE 16 – RATING OF IHPC PROGRESS IN HELPING INCREASE DIVERSITY IN HEALTH PIPELINES,
FREQUENCY OF RESPONSES (N=102)**



Assessment: Policy and Practice Change

Targeted Goals and Outcomes

One of IHPC's goals is to identify various barriers that prevent cohesive health workforce pipelines and facilitate solutions to these barriers. The following outcomes are targeted:

- Changes in policies and practices start to occur (E1)
- Administrative and policy barriers are removed (E2)

Activities and Interventions

Since its founding, IHPC has actively engaged community partners and stakeholders to:

- 1) Identify policies and/or practices that impede building strong and diverse career pathways connecting to health professions, and
- 2) Advocate for changes in those policies.

Progress

To what extent has IHPC been able to engage its members in advocating for policies and practices that support health workforce development?

The previous sections have discussed IHPC's ability to engage its members to address policies and practices affecting health workforce development, such as the Convergence conference, Nexus meetings and participation in regional grant initiatives.

In addition, IHPC has led initiatives to provide Calls to Action. The organization has become a point of contact for statewide government and advocacy groups, such as the California Office of Statewide Health Planning & Development (OSHPD), California Health Professions Association and the California Health Workforce Alliance. As a pioneer of promoting diversity in the health workforce, the organization is regularly asked to submit recommendations to the California Health Workforce Alliance and the State Health Workforce Development Council.

IHPC is providing input to a newly formed Health Workforce Commission, which is supported by four statewide foundations. The focus of the commission is the need for a more strategic, aligned approach to health workforce development with a focus on diversity, equity and shared ownership for improving the health and well-being in our communities.

Opening the lines of communication between regional educators and industry stakeholders has helped to identify policy and practice barriers to workforce pathways and has resulted in solutions. One example was supplied by Christine Thomas, special projects and grant liaison with Baldy View ROP, in her interview when she explained how semantics can get in the way of developing and funding programs for students:

"In public school if [the term being used to describe an internship or externship] is not recognized by the Department of Education, we can't fund it. [IHPC] helped facilitate that discussion. ... With a high school and ROP, we would call the job training 'a community classroom opportunity,' but the term externship was not recognized in the context we were using it. ... So we worked with [IHPC] as a go-between with the industry. ... We decided our 'community classroom opportunity' involves all these different components, and students are applying and practicing hands-on skills,

so we were able to conclude we could call it a 'field experience opportunity.' We were able to make that differentiation to base our decisions and our funding and our programs."

Another example of overcoming restrictions to providing work experience opportunities for students was provided by an interviewee who asked to remain anonymous:

"The number one thing that I can speak to is related to working around barriers for placement of students into job shadowing and internships. Carol [Allbaugh] and her team have really helped to alleviate concerns about liability and risk management that many companies may think about when dealing with high school students. Anytime I am told that one of my students will be placed because liability and worker's compensation will be covered, it's a win for my kids. When you say policy, I, personally, do not know if IHPC has changed a law or found some new scholarships through state mandates, but I know my kids are getting the experience and having doors open."

Phone interviews and online survey write-in responses reveal that HIPAA and other workforce regulations, such as age requirements as well as data security and liability issues, impede the provision of work-based learning experiences for students in the region, particularly in clinical settings.

"The biggest barrier is getting the kids into medical arenas and overcoming the privacy and legal barriers that we face when introducing elements like these into already established facilities," said Lenny Pepper, vice president of special programs and projects at Borrego Health Foundation. *"IHPC continues to find ways to make it work."*

To determine the extent that IHPC has worked to change policies and practices in the region, online survey participants were asked if IHPC had ever assisted them in navigating a policy or practice change. Only a few respondents, 14, the equivalent of 13%, stated yes (Figure 17). The majority were either not sure, 38%, or reported not receiving any assistance in navigating policies/practices, 48% of respondents.

FIGURE 17 – HAS IHPC HELPED YOU NAVIGATE A POLICY OR PRACTICE CHANGE (N=104)

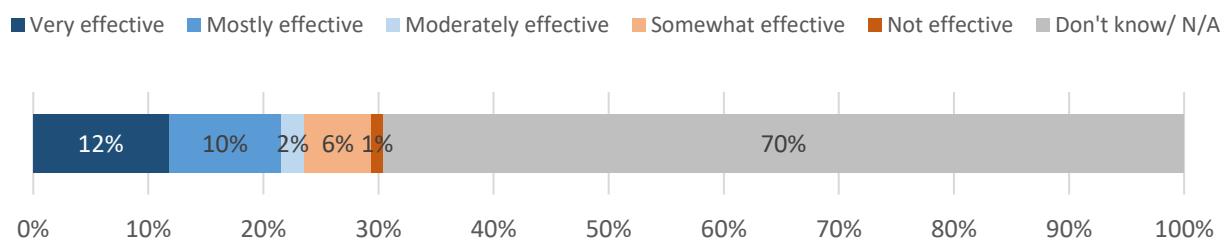
	Frequency of Responses	Percent of Responses
Yes	14	13%
No	50	48%
Don't Know/ Don't Remember	40	38%
Total	104	

To what extent are institutions adopting policies or practices that improve academic and career readiness? And to what extent has IHPC been able to improve the ways entities and systems engage employers?

Mixed results were collected regarding IHPC's efforts to change policies and practices in the region. Online survey results in this area did not reflect positively on IHPC's work. However, write-in responses and anecdotes shared during phone interviews present a very different picture.

To gauge how effective IHPC has been in advocating for policies and practice change to strengthen workforce pathways, online survey participants were asked to provide a rating on a 5-point scale. Only 12% of those surveyed said the organization is very effective in advocating for changes in policies and practices, while 10% said the organization is mostly effective (Figure 18). Seventy percent of respondents selected the "Don't know/Not applicable" option.

FIGURE 18 – RATING OF IHPC EFFECTIVENESS IN ADVOCATING FOR CHANGES IN POLICIES AND PRACTICES (N=104)



The results of this survey question could be interpreted two ways. First, IHPC may not be effective in advocating for changes in policies and practice, although anecdotes from the phone interviews seem to indicate otherwise. Second, there could be a perception issue.

Stakeholders may not be aware of the behind-the-scenes work that IHPC is regularly engaged in as a liaison between the education community and employers to break down barriers impeding student pathways.

In contrast, positive write-in responses for the online survey related to policy and practice far outnumbered negative write-in responses, of which there was only one (Figure 19).

FIGURE 19 – POLICY/PRACTICE CHANGE WRITE-IN RESPONSES

Online Survey Responses Regarding Policy/Practice Change
IHPC has worked to establish a program at Kaiser Permanente for our students. This program is allowing our students to participate at the hospital in ways that greatly benefit the students.
IHPC sincerely believes in internships and work based learning. IHPC supports entities large and small, and creates the norm that this practice is vital. We have, therefore been able to offer internships to a greater number of college students from the IE, who in turn, want to continue contributing to the IE health professions community well into the future. The result of IHPC is therefore, not simply 'filling one internship' but it is growing the next generation with the same commitment!
IHPC has enabled students to go into hospitals and clinics to shadow [doctors] and nurses. This is HUGE. They have developed those partnership for the entire region to benefit from.
Enhance curriculum by providing awareness of the https://www.ca-hwi.org/ to educators in various industries. Facilitates alignment with California Community College system.
IHPC did convince us to allow teacher externships even though we previously had a no shadowing policy. Mainly this was accomplished because IHPC representatives gave us hope for a more realistically educated workforce in the future and that possibly teachers will be able to steer students toward careers that have shortages of qualified applicants.
I don't feel that IHPC has been involved with policy changes.
I have seen IHPC do great things for districts and students. Students are so blessed to have an organization that cares so much about them and work tirelessly to provide a variety of learning opportunities.
I am unable to comment thoroughly on this as I have not witnessed this personally, but I have heard of IHPC making progress with other school districts in opening doors for student shadowing/internships.
The Inland Coalition has recently launched a pilot Faculty Externship project where teachers are placed at healthcare sites for 16 hours of "real time" experience. Several of the healthcare sites have requested the teacher provide a live scan and fingerprints. When teachers asked their districts for this information, there was much resistance due to regulations around private information. After several attempts to resolve the situation, to no avail, Pomona Valley Hospital and Medical Center intervened and said that a letter from Inland Coalition stating that all the teachers have been recruited from local school districts which require fingerprints and live scan as part of the employment process...this would suffice for the Externships. This concession was a breakthrough in the Extern project and opened the doors in many of the healthcare facilities. Thanks to Pomona Valley Hospital and Medical Center for their willingness to move the project forward...an example of true partnership!

While several interviewees felt they could not directly address IHPC's work related to policy and practice change, six interviewees were able to provide concrete examples of related work that they had been directly involved in with IHPC (Figure 20).

FIGURE 20 – POLICY/PRACTICE CHANGE INTERVIEW RESPONSES

Phone Interview Reponses Regarding Policy/Practice Change
Dr. Gina Boster, CTE, curriculum and educational services director for the Corona-Norco Unified School District noted obstacles to creating work-based learning opportunities for students: "Although we have met some roadblocks in terms of Risk Management, we are moving forward."
Maureen Sinclair, California Career Pathways Trust Grant project director for Norco College: "Some of the barriers I think they are not going to be able to change are the amount of clinical sites that are available to place students. Another barrier is that clinical sites want the students to be 18 and over and that makes it very difficult for students to get into the sites. However, IHPC is working to provide the best opportunities they can."
An interviewee who asked to remain anonymous stated: "They helped us with the high school internships because with students under 18 years old, there is usually concern about HIPAA. They did a lot of education on what was being taught in the Health Careers Academy and how HIPAA was already being taught. They helped us figure out some policies involved and because of that we were able to get enough information from the schools ... to alleviate the concerns with our leadership. With that, we were able to start a pilot program working with IHPC to actually have some high school students come from the career pathways. It was limited at first but with the help of our teachers that went through the externships, we were about to launch a successful pilot program which we have adopted."
James Hattar, community recruiter for CRY-ROP: "We are trying to get students into [Arrowhead Regional Medical Center], and they may have some type of policy that they don't have anyone under the age of 18 to intern, and that becomes a huge issue. You have kids in a health care pathway, and we are trying to get these students some hands-on training, and they are not able to because of that barrier. That age issue is a hindrance."
Another interviewee who also asked to remain anonymous stated: "The challenge is actually in the language of it. In education, when the word 'pathway' is used, it can mean students who are taking a health specific class like pharmacy technician or medical assistant as part of their school day. Although we have some programs like that, it's been a barrier to a lot of my kids because they have to meet A through G requirements for college admissions while trying to get relevant career experience at the same time. For a lot of them this means taking four years of science, math and foreign language, leaving no time for health specific classes. The access comes through having a variety of programs that meets students' needs whether they are in a health careers 'pathway' or not. This distinction is really important because I have heard people in industry believe it is some sort of mandate for students to be a part of a 'pathway' in order to access this program. If I have a kid who is taking several science courses and they want to volunteer in clinical settings, I think they are just as qualified as those students who are in health career pathways. I caution that we need to be really careful with the language and not limit these great opportunities to only kids in health pathways. The

Inland Coalition can help us with making sure that industry and education are using common language, so that we are not limiting people's understanding that these opportunities are only for health career 'pathway' students."

Patricia Etem, Southern California regional manager for Health Career Connection: "A critical barrier that IHPC is trying to address is that people of color have a harder time to get hired. They are not provided with a 'Yes, you can' attitude. IHPC has invested to help change this attitude. They are recruiting people of color as interns and educating them to build competencies. ... They are giving employers confidence to hire people of color, bringing the regional employers to the next level of the understanding of workforce diversity. Ultimately, they are working to keep people in the region."



Summary & Conclusion

Evaluations typically assess data pertaining to an organization's target population, approach and outcomes. Consistent data collection is necessary to show a nonprofit is consistently reaching its population, appropriately delivering services and achieving intended outcomes.⁷

The evaluation team adopted a qualitative approach due to a unique collaborative process that evolved over the 10-year history of IHPC. (For more details on the evaluation approach please refer to the online survey tool in Appendix J and the phone interview questionnaire in Appendix K.)

For an organization with a very limited budget operating in a large region, it is a challenge to determine whether program beneficiaries achieve greater outcomes than other individuals not receiving services. This measure is typically the most important in conducting an evaluation.

Through anecdotal and empirical evidence, IHPC has demonstrated that those who received services and/or participate in collaborative activities did receive benefit, improve their knowledge, or receive trainings, materials and services that benefitted their constituency.

Each assessment section in this report contains activities paired with performance measures and outcomes that the evaluators recommend tracking in the future.

These performance measures are directly linked to IHPC's goals, and can prove whether the organization is achieving its goals and directly benefitting students in health pathways, educators and health industry employers.

Part of the evaluation involved reassessing the region's current labor market needs. Key findings are:

- The health care industry currently accounts for about 137,000 jobs in the Inlands Empire and is projected to add about 24,000 new jobs by 2021.
- When compared to national, state and other regions in California, the projected five-year employment growth in the Inland Empire, 17.4%, is stronger than other regions in the state and 3% higher than the state average.

"The other obstacle, for which IHPC stands as one of the few shining examples in the state, is that the idea to building the path to the health workforce is a more collaborative approach—to bring together employers to better understand and share data and communicate a more consistent and accurate picture of the workforce; the support of the academic pathways; and on the academic side, to look beyond proprietary interests, to consolidate focus and scale the best programs that offer the greatest potential to ensure that one employer's success in meeting their near-term health workforce needs doesn't come at the expense of others."

— Kevin Barnett,
senior investigator,
Public Health Institute

⁷ Forti, Matthew. "Seven deadly sins of impact evaluation." February 22, 2012. Stanford Social Innovation Review. https://ssir.org/articles/entry/seven_deadly_sins_of_impact_evaluation

- In 2017, the health care sector continues to provide opportunities for high-wage employment in the region, with average industry earnings per worker of \$68,754. This represents a 16% growth in earnings across the sector over the last five years.
- The ethnic and racial disparities for higher-wage occupations that require advanced education degrees have decreased, demonstrating a positive change. For example, Hispanics currently represent 18% of the registered nursing workforce compared to 12% in 2012.
- The range in educational requirements for health care occupations means that careful regional planning is needed to meet increased employer demand for a competent health care workforce.

These findings reaffirm the need for a regional entity to coordinate efforts among education providers and health care employers in a vast geographic area that is home to more than 4 million residents.

As part of its qualitative approach, the evaluation team conducted interviews and created an online survey, which received 136 responses.

- The most frequently utilized services by IHPC stakeholders who participated in the survey were IHPC conferences, student work-based learning activities and Nexus group meetings.
- IHPC was rated most highly for engaging a diverse group of stakeholders, followed by engaging educational institutions.
- Nearly 70% of education respondents said IHPC had helped them make new connections.
- 85% of respondents report that they received “a lot/a great deal of support” from IHPC.
- Occupations that survey participants felt had been most positively impacted include: behavioral and mental health professions; allied health professions; and public health professions.
- 73% of respondents said IHPC is “very effective” or “mostly effective” in bringing new opportunities to support the advancement of students along the pipeline.

The evaluation also sought to qualitatively analyze the broad range of programs offered by IHPC and the variety of roles it plays in the region as a convener and service provider. The evaluation revealed that IHPC has many accomplishments that deserve recognition. The work is being done. However, it should also be noted the online survey and interviews reveal communication of what is being achieved deserves a boost.

Notable accomplishments of IHPC programs conducted during the 2016-17 academic year include:

- 7,684 students and educators were served;
- 874 students attended the Health Professions Conference;
- 115 career speakers made presentations to health pathway classrooms;
- 50 student internships were offered, compared to 19 in the 2015-16 academic year;
- 39 MOUs were created;

- 23 new programs were started; and
- The number of students participating in job shadowing increased from 24 in the 2015-16 academic year to 51 in the 2016-17 academic year.

One of the most effective programs launched by IHPC is its Nexus Groups, which have resulted in a stronger, more cohesive K-12 pipeline that connects to regional community colleges and universities. Through the Nexus Groups, activities are coordinated and a broader, regional vision addressing the provision of opportunities for underserved communities has been achieved. Members of the Nexus Groups strategically address workforce gaps using real-time workforce data, and pathways toward licensing, certification and professional programs can be tailored and streamlined.

The evaluation team gathered substantial positive feedback about the important role IHPC plays in the region and the benefits of its services. IHPC is motivated by a sincere belief in the efficacy of internships and work-based learning for students. As demonstrated through its long list of educational and workforce partners, the organization works collaboratively with a diverse array of entities, large and small, to provide these services.

IHPC's work-based learning opportunities contribute to preparing the next generation of workers who will contribute to Inland Empire health professions. With each student who participates in an internship, camp, site visit or mock interview, IHPC is ensuring the future of prepared and competent health workforce in the region. As one employer stated, *"IHPC representatives gave us hope for a more realistically educated workforce in the future and that possibly teachers will be able to steer students toward careers that have shortages of qualified applicants."*

Although online survey responses were mixed as to the efficacy of IHPC in the area of policies and practice change, numerous write-in response and interview anecdotes substantiate that IHPC is conducting work in this area, and is, most importantly, making progress. One example that deserves to be highlighted is IHPC's efforts to remove a barrier to faculty internships, by assuring employers that teachers employed by local school districts are required to complete fingerprinting and Live Scans, which opened many doors to health care facilities.

The evaluation team made several critical determinations:

- IHPC has created a functional and stable infrastructure to engage an extensive array of stakeholders to support a strong health professions pipeline in the Inland Empire.
- IHPC has been able to engage and support its network of stakeholders in systems change across the Inland region.
- Through its work as a regional convener for employers and educators, IHPC has been able to serve as a bridge across disparate entities, facilitating the use of a common language to overcome barriers hindering the provision of workforce pathways.
- Through its extensive services—from student work-based experiences to teacher externships, conferences and Nexus Group meetings—IHPC has facilitated the expansion and strengthening of health workforce pathways.

- IHPC's role as a regional convener of stakeholders has enhanced communication and resulted in new linkages, allowing resources to be leveraged and used more efficiently.
- IHPC has been instrumental in effecting policy and practice change, based on examples provided through online survey write-in responses and phone interviews.

Due to a lack of quantitative data, this evaluation was not able to determine whether IHPC is increasing diversity in regional health pathways. Labor market data analysis indicates progress has been made in this area, and that diversity of the health care workforce has increased overall since 2012. The analysis did find that some equity gaps still exist, such as the underrepresentation of Hispanics who comprise only one-third of the health sector workforce but comprise more than one half of residents in the region.

Stakeholders interviewed seem to believe improved workforce diversity is being achieved—especially because the activities being conducted are geared toward increasing diversity and strengthening pathways in underserved communities—but frequently those interviewed said they could not confirm with absolute numbers whether this is actually being achieved.

For example, Patricia Etem, Southern California regional manager for Health Career Connection, said:

"I can attest that they definitely practice diversity and have put efforts in place to increase diversity in the health career workforce in the region. The Inland Coalition has been instrumental in ensuring that the diverse groups of interns are placed with health sector employers. Their method to increase diversity is spot on, but the outcomes are unknown to me."

She felt IHPC's impact on diversity has been demonstrated through:

1. Norm change, helping [disadvantaged] groups access resources;
2. Building awareness of Inland Empire diversity;
3. Increasing student awareness of pathways; and
4. Bringing industry and education together to work on opportunities for all.

Phone interviews, online survey write-in responses and a review of IHPC's documents, confirmed what the organization has long believed—that it has established a robust framework providing leadership and support for health pathways development, and that IHPC is a stabilizing force in the region, bringing together disparate entities to collaborate on strategic initiatives.

"IHPC has done great work mobilizing their community," said Dr. Katherine Flores, director of the Latino Center for Medical Education and Research at UCSF Fresno. *"Not knowing the outcomes, I can only say that the strategy that focuses on collaboration and community is in place."*

Furthermore, IHPC has become a model that state officials turn to in developing new initiatives. For example, Kevin Barnett shared that four California foundations are collaborating on a statewide health workforce master plan and have looked toward IHPC as they consider how to embark on engagement for and development of the master plan.

The infrastructure IHPC has established to provide a collaborative forum for planning and the implementation of services is valued by constituents. The organization has had an impact in helping the

region overcome previously insurmountable challenges and should be applauded for its efforts to build a health workforce to meet the needs of residents and address a regional shortage of health care professionals.

The evaluation identified several other areas of need:

- Amplify and disseminate IHPC's achievements in the areas of policy practice and change. Stakeholders seem unaware of the role IHPC is playing in this area. This work could be highlighted in an annual report; conference presentations or through a page on the Inland Coalition website.
- Increase work experience opportunities for students (i.e., internships, workshops, job shadowing, etc.), and expand collaboration and opportunities in the area of adult education, as requested through online survey write-in responses and phone interviews. Also requested were more opportunities to engage with health professionals and more opportunities in the areas of behavioral health, speech therapy, occupational/ physical therapy and dietetics.
- Continue the dialogue and outreach to employers and clearly define the value that IHPC can bring to the industry partners. Employers will be more engaged if they see the value of offering work-based learning opportunities to students.
- There is a need to communicate program outcomes to partners and stakeholders. This was considered one of IHPC's least effective areas, as expressed in interviews. Patricia Etem noted, *"Partners are working collectively to improve the outcomes of the partnership, but these outcomes are not being tracked. It is necessary to sit down with partners and decide what is measurable for each partner and how to track it."*
- Expand outreach to community and parents. One write-in response noted, *"We noticed that although the outreach is good, we still have students, parents and communities of color and other ethnicities who have not heard of the wonderful opportunities available to them."*
- Expand presence and support services to Riverside County. Comments from survey responses demonstrate that community members feel that IHPC has a greater presence in the neighboring San Bernardino County.
- Consistency in branding is needed, particularly in the visual presentation of printed materials. All printed fliers promoting IHPC should use IHPC's colors and logo, which should be prominent. It is not clear to the average person, for which events IHPC is the organizer/host. Branding is incredibly important for establishing and maintaining an organization's reputation and reach. Using the same fonts and colors to evoke IHPC's brand is a must, especially for its conferences, so that people know the event is affiliated with IHPC.

Appendix A – 2009 Strategic Framework

1. Civic Engagement, Policy and Systems Change: Reach Out has identified the need to work in a more upstream approach to break down the barriers preventing youth and families from accessing comprehensive services.

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Identify key policy areas where Reach Out can make a difference
 - Work through existing collaboratives and coalitions, enlisting their assessment capabilities, to identify priority policy items.
 - With the collaboratives and coalitions, develop a policy agenda that is driven by collective action of the various groups.
- Increase staff, agency, and client capacity to advocate for programs, clients, and policy change
 - Work with The California Endowment to set up advocacy trainings that are offered through the Center for Healthy Communities.
 - Organize Power Analysis training through The California Endowment.
- ExecNet:
 - Develop broader collaborations with faith based and other community benefit organizations through an auxiliary organization for second-tier management and staff of agencies who offer services in the ExecNet region, but which do not have their executive directors based here.
 - Continue participation with the San Bernardino County Capacity Building Consortium to bring more resources and greater notice to the needs of the region. Take a leadership role in building the capacity of ExecNet and its members through collaboration with SBCCBC's broader goals.
- West End Gangs & Drugs Task Force:
 - Continue a leadership role in developing the vision and implementation of the WE GDTF.
 - Develop a workplan in line with the County Dept. of Behavioral Health's goals and objectives for 2009/2010 which will lead to decreased use by underage youth of alcohol; and lower substance use rates in the West End.
- Inland Coalition Advancing Diversity and Education in the Health Careers (Inland Coalition):
 - Pursue funding for the Inland Coalition to have a project director and operating funds.
- A holistic youth development strategy is already in place and being used for existing programs, including Healthy Teens, Friday Night Live, Mentoring, Health Careers, and Pregnancy Prevention.
- Reach Out's programs are scalable and lend themselves to expansion in most all communities and settings.
 - Define a strategic plan for the coalition.
 - Recruit and hire the project director to carry out the strategic plan in coordination with the coalition members
 - Continue to incubate and support the Inland Coalition
 - Establish a shared governance structure
- Youth Substance Abuse Treatment:
 - Begin dialogues with key community stakeholders (treatment providers, schools, parents, law enforcement, Dept. of Behavioral Health and funders) to assess the need for substance abuse treat for youth in San Bernardino and Riverside Counties.

- Develop a plan based on the assessment that will lead to appropriate services for youth in need of substance use/abuse treatment.

2. Growth Strategy: Over the past four years, Reach Out's budget and programs have grown fivefold. In defining a growth strategy, it is essential to find a balance between geographic and programmatic expansion with a coherent mission focus, clear strategy, and appropriate infrastructure to manage growth.

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Build bridges between all programs that are part of the youth development spectrum, especially as they relate to the Healthy Teens Program:
 - Better integrate sites and programs.
 - Develop a system to monitor and track the implementation of the youth development model in all programs.
 - Match programs to the needs of the youth and families being served.
 - Develop strategies to engage parents into programs, including parenting classes and supports.
 - Better integrate Friday Night Live/Club Live into Healthy Teens; all school-based staff have the tools and knowledge to be able to advocate for FNL programs on campus.
 - Better integrate Mentoring and Exploring Health Careers in Healthy Teens.
 - Integrate pregnancy prevention curriculum into Healthy Teens.
- Planned Expansions to Adjoining Regions
 - Explore options for expansion to Riverside County
 - Continue to work with Pomona – city and school district – to explore expansion of programs and funding.
- Infrastructure Development
 - Human Resources – support for Director of Internal Program and Executive Director
 - Clerical Support – write into all grant applications a portion of a staff person for clerical support
 - Website Support – designate a current staff member to be responsible for website updates and effectiveness.
 - Web-based dashboard – develop a dashboard evaluation system that is user friendly and easily accessible by board and staff.

3. Funding diversification and sustainability: To date, Reach Out has relied primarily on the executive director for all fund raising and grant writing. To maintain and expand the programs that fulfill our mission, there is a great need to build a stable long-term funding base that is made more pressing given the uncertain and difficult economic environment that is expected to last throughout the duration of period covered by this plan.

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Develop a plan to diversify our funding base, including:
 - Engaging local businesses in fundraising
 - Building an individual donor base
 - Developing a planned giving strategy

- Build internal staff capacity for fundraising (both in terms of dedicated development staff and training for all staff)
- Build fundraising capabilities of board through selection, planning, and skills building (see Board Development below)
- Extend grant-writing capabilities by either hiring a development associate or engaging a contract grant writer

4. Marketing and communications: Over the past year, Reach Out embarked on a process to redefine our public image. With the basics now in place, we need to increase Reach Out's profile in the community based on our expanded mission and vision.

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Develop an integrated marketing strategy
- Make better use of public relations techniques and media
- Develop and improve communications collateral: logo, website, brochure
- Design co-branding opportunities with other organizations and businesses

5. Board Development: How to build and support a board able to effectively lead Reach Out through difficult economic times and into the next phase of its development.

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Recruit board members to diversify professional, ethnic and regional composition of board
- Increase the fundraising capabilities of the board by providing trainings either with other ExecNet member boards or with Reach Out alone.
- Hold regular, short trainings for board members to develop a skillset for more sophisticated fiduciary oversight
- Implement structures, committees, and processes for effective board engagement; ensure that committees are constituted and meeting on a regular basis.
- Increase board knowledge and understanding of programs and strategies (e.g. staff presentations, attendance at program events)
- Increase staff knowledge of board responsibilities as well as providing more opportunities for board/staff interaction.

6. Strategic Programming: What are the core programmatic competencies for Reach Out to maintain and expand? How can Reach Out continuously improve its programs? Which programs or opportunities, if any, may need to be given up?

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Increase program focus and integration:
 - Focus on programs that are complementary and congruent
 - Bring more focus on intervention, parent and family programs
- Use evaluation as a tool for continuous program improvement by developing a Dashboard system that is usable by all staff and board members
- Evaluate funding sustainability of current and prospective programs

- Evaluate timeframe for funding of current programs and potential replacement of current funding sources with new ones for program continuity
- Research funding trends and opportunities for possible future programs
- Knowledge-driven programming (i.e. programs designed around model programs, strategies, and research-based principles of behavior change)
- Develop programs in new, high-demand areas, such as:
 - Senior-youth intergenerational programs
 - Family programs
 - Intervention programs, including continuing gang and violence prevention

7. Staff Development: How can Reach Out develop its staff to ensure continued success in the next chapter of its life?

Strategic Plan – Primary Areas for Engagement Over the Next Two Years:

Programmatic and Operational Strategies

- Engage consultant to assist with management team development for Directors.
- Establish a leadership development training course for staff members to achieve goals established during the performance planning sessions with their directors.
 - Skills training for staff in communications, leadership, and other areas
- Engage board and staff in continuity/succession planning for upper- and mid-level staff.

Appendix B – 2012 Strategic Framework

Advancing Diversity and Education in the Health Professions

IHPC goals are to:

- 1) Achieve a health workforce that is diverse, community responsive and meets the needs of the region's healthcare employers.
- 2) Work collectively to identify and facilitate solutions to the educational, social and environmental barriers to a seamless health workforce pipeline.
- 3) Support coalition members through dissemination of information and resources, training/technical assistance, research and evaluation, policy development, advocacy and coalition building.

Strategy 1: Regional Health Workforce Nexus Groups

- A. Nexus Groups will be offered support services by sub region:
 - Monthly Health Career Pipeline Network meetings
 - Technical Support for K-12/high school health academies and pathways
 - Data on the region's health workforce needs
 - Bridge between Education and Healthcare Employers: Regional coordination of student work experience placements (job shadow, internships, work experience)
 - Optimization of connections between Health Sciences programs in K-12, community colleges and universities and industry partners, community partners and funders
 - Resources to increase opportunities for students interested in health careers
- B. Nexus Groups established over a 5-year period in the following sub-regions, based on readiness to engage. Regions with current activity/partnerships include:
 - 1) San Bernardino City, Muscoy, Highland (Started June 2012)
 - 2) West End (Chino, Chino Hills, Ontario, Montclair, Upland) and Pomona Valley
 - 3) City of Riverside

Strategy 2: Annual Conferences and Workshops on Health Career Education:

- Annual *Health Careers Conference* for High School students
- Annual *Counseling for Health Careers* conference/training for counselors and faculty
- Link to regional and state workshops and trainings for Health Career educators and counselors (i.e. Health Workforce Initiative trainings, community colleges workshops, CA Dept. of Education conferences...)

Strategy 3: Regional Workforce Intelligence

- Co-partner with County Workforce Development and CC Center of Excellence on IE Health Workforce Data Report 2011
- Link to state and national data/reports on health workforce trends
- Monitoring emerging health workforce needs for the region through ongoing dialog with local employers

Strategy 4: Increasing Health Workforce Diversity

- Participation in the CA Health Professions Consortium network of healthcare pipeline programs, linking local students to a state-wide network
- Data, resources and strategies on increasing opportunities for under-represented minorities in higher level health professions (including scholarships, loan repayment and tuition reimbursement)
- Identification of and partnership with local K-12, county, college and university programs addressing health workforce diversity
- Development of system to monitor and measure progress on health workforce diversity goals

Strategy 5: Quarterly Coalition Meetings

- Presentations by Health Career Education and Pipeline programs
- Review and dialog on health workforce data and emerging industry needs
- Strategic plan updates, evaluation of activities, revised goals and objectives
- Policy engagement
- Presentations by experts on key health workforce topics

Strategy 6: Infrastructure Management for Implementation of the Inland Coalition Strategic Plan

- Grant-writing for Inland Coalition/region-wide strategies
- Evaluation, tracking/mapping of outcomes in 1) partner contribution and engagement, 2) increased health career education programs, 3) increase in health professions diversity and 4) meeting workforce needs of local health employers
- Website, social media and communications
- Continued partnership development with key industry, education and community stakeholders

Appendix C – Work-based Learning Definitions

Work-Based Learning Options for Health Careers Pathways:

Career Speakers—Speakers from various Health Career occupations come to the classroom and make presentation about their work and the skills needed in their profession; Q and A session.

Health Career Fair—Students in the health care pathway create a visual board/display of the health occupation that they are considering. Students research and find real-life information regarding the occupation and are required to display it on a given day.

Project-based Learning—Project-based Learning (PBL) is an inquiry based process for teaching and learning. In PBL, students focus on a complex question or problem, then answer the question or solve the problem through a collaborative process of investigation over an extended period of time. Projects often are used to investigate authentic issues and topics found outside of school. During the inquiry process, students learn content, information, and facts necessary to draw conclusions about the question. Students also learn valuable skills and habits of mind during the process. (Refer to www.pbl.org.)

Example: Students select the health care issue of genetic cloning, research the topic, and make a presentation to bio-medical students.

Problem-Based Learning—A form of cognitive learning, in which the learner constructs meaning based on experiences orchestrated or facilitated by the teacher. A lesson begins with a question or problem, provided and explained by the teacher. Students, almost always in cooperative groups, decide on a strategy for resolution of the problem. Depending on the level of the students, the teacher may provide varying levels of support for the student groups. At the university level, PBL is very student-driven, but at elementary level, PBL lessons involve a relatively high level of teacher guidance. PBL lessons may take a short time, a class period, a week, a semester, or several semesters, and will usually end with a culminating activity or a reflection to provide closure for the learning.

Example: A health care partner explains a non-confidential problem/situation that need to be addressed. The partner brings needed information to the classroom and asks students to assist in the solution. The business agrees to be an on-going contact for information. The students research the problem and offer solutions during a planned presentation.

Service Learning—A teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

Example: Have students identify a health-related need in their community (school, city and neighborhood).

Students research the need, identify business and community partners and plan an activity to address the need.

Student Informational Interviews—Students select a given career area and arrange for an interview with a health care professional who can spend at least 1 hour giving information to the student. The student comes with a prepared set of questions, dressed appropriately; writes a thank-you letter.

Provide a list of possible nearby entities that students may call or visit. Have the students practice the interview.

Example. Prepare students on how to approach a health care facility's personnel to request an informational interview with an adult before the actual interview. Students must show completion of all the steps before the actual interview.

Mock Interviews—Invite members of the health care community (human resources department) to simulate a real-life interview with students who desire to enter the health care workforce. The students are prepped for the interview and coached on how to dress and respond to potential questions. After the interview, the health care professional gives verbal feedback to the student.

HOSA Club—A national student organization endorsed by the U.S. Department of Education and the Health Science Education Division of the Association for Career Technical Education (ACTE). HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people. HOSA's goal is to encourage all health occupations instructors and students to join and be actively involved in the HSE-HOSA Partnership.

- HOSA provides a unique program of leadership development, motivation and recognition exclusively for secondary, postsecondary, adult and collegiate students enrolled in HSE programs. HOSA is 100% health care.
- JUMP—Junior Upcoming Medical Professionals, which is similar to HOSA, but at the middle-school level.

Health Careers Summer Camp—A one-to-two-week camp for students who are enrolled in a health care pathway. The camp provides hand on experience, field trips, speakers and community projects for students. Students can obtain exploratory work experience credit for participation. This camp can also be held for feeder schools to increase the interest in health care occupations at the high-school level.

Health Care Panel Discussion—A group of health care professionals are invited to give an overview of their occupations, provide information to students and answer questions. Professionals are given a tour of the classroom by pathway students and treated to a small reception with administrators, etc.

Health Entity Site Visit—Using the Junior Achievement Model, the teacher delivers lessons prior to the site visit to prepare students. The site hosts a tour and small groups to discuss ethics and responsibilities and interview skills. All training is provided through IHPC.

Mentoring—Health professionals or college students are recruited to meet with a small group of students for a designated period of time. Mentors will meet with the same students each time. Training, lessons and materials are provided. The mentor must be available at the designated mentoring time which varies per school. The student is connected with a health care professional for a designated period of time with set activities and contacts. The mentor program can be for career coaching, tutoring, technical information or any combination of the above.

Job shadowing—A purposeful visit to a workplace to obtain more information regarding specific occupations or industry. This activity can take many forms, but does require preliminary work with the students, specific instructions once they are at the job site, and a follow-up activity.

Internships (paid/unpaid)—This work-based learning opportunity is reserved for 11th and 12th grade students who have completed some of the pathway sequence. The internship is with a health care facility for a designated period of time depending on its paid or non-paid status. If non-paid, the student can receive credit under Exploratory Work Experience and is covered by the district liability policy. If paid, the student must follow the Work Experience rule for students working while in school. The internship opportunity can be part of a capstone course in a pathway sequence. In 2016, IHPC developed the Learning Inspired Field Experience (LIFE) program which is a structured unpaid field experience for students. Liability is covered through Reach Out.

Externship Program—Educators from the health care pathway complete 5-20 hours of job shadowing, intern, assist with low-level activities, and obtain information and skills needed to teach students in the classroom.



Appendix D – Initial Logic Model Draft with Corresponding Outcomes

LOGIC MODEL

Community Need/Problem: To meet the need for regional planning to address health workforce demands. To prepare students to enter the future health workforce.

Goal 1: Achieve a health workforce that is diverse, community responsive and meets the needs of the region's health care employers.

Goal 2: Work collectively to identify and facilitate solutions to the educational, social and environmental barriers to a seamless health workforce pipeline.

Goal 3: Support coalition members through dissemination of information and resources, training/technical assistance, research and evaluation, policy development, advocacy and coalition building.

Inputs:

- Reach Out/IHPC staff
- Funding
- Volunteers
- Collaborators
- Students
- Educator/Teacher learners
- Trainings
- Curriculum and Tool Kits
- Materials: handouts, etc.
- Meeting Space
- Resources to increase opportunities of students interested in health careers
- Supplies/Computers/Office Space
- Website and Social Media Outreach

Collaborators:

- K-12 school district representatives
- Community college and 4-year university faculty
- Hospital and health care business and agency representatives
- San Bernardino County and Riverside County Office of Education and Workforce Development staff
- Professional organizations
- Community and social service agencies and faith-based partners
- Chambers of Commerce, economic development, local government

Activities	Outputs		Outcomes - Impact		
	<i>Performance Measure/Output</i>	<i>Short</i>	<i>Medium</i>	<i>Long</i>	
1. Nexus meetings in 4 subregions	1. # of meetings, # of attendees, # of regular partners	1-6. Development of a system to monitor and measure progress in health diversity workforce goals	1-15. Increase in data, resources and strategies to increase opportunities for underrepresented students to enter health pipeline	1-15. Supply gap for health care careers in the region is decreased.	
2. Technical support for K-12/high school academies and pathways	2. # of school districts, # of support activities conducted/year	1,3,4,11, 15. Improved dialogue on health workforce needs and emerging industry needs	1-15. Increase in health career education programs.	1-15. Seamless and strengthened health pipeline	
3. Data collection on region's health workforce needs	3. # of reports and studies generated	2, 7, 10. Professional development for educators, providing a community of support for teachers, providing tools and resources	1-15. Health academies and pathway programs are strengthened by an increase in community partnerships and capacity	1-15. Diversity is increased in key health professions.	
4. Serving as bridge b/w education providers and health care employers, community partners and funders	4. # of partners	4, 9. Increase in internships and work-based learning opportunities; more students in the region obtain employment	1-4. Coalition provides an advisory role to school districts developing pipelines to in-demand professions; and provides assistance in setting up health academies throughout region	1-15. Residents fill local jobs in the region's health workforce.	
5. Regional coordination of student work experience placements	5. # of work experience placements offered each year, # of students who are placed, # of employers providing work experiences	5, 9, 12, 13. Increase in student interest in health careers due to increased exposure	1. Nexus partners have working knowledge of health career education programs available to students.	1. Strategic visions for the region is developed and carried out through each subregion's work plan.	

Activities	Outputs		Outcomes - Impact		
	Performance Measure/Output	Short	Medium	Long	
6. Mapping of health career education programs	6. map of education programs	5. One-stop-shop: Increase in work-based learning opportunities because IHPC provides more efficient process for employers, who only have to deal with one entity; similarly, the process is more efficient for school districts with IHPC as middle-man screening applicants	2. Improved delivery of health-related curriculum	1. Real-time response to regional challenges	
7. Trainings developed and offered (e.g., Teacher Resource Day, Health Sector Industry Day, Work-based Learning Institute)	7. # of trainings held/year, # of attendees/training	6. Consistent tracking of changes in the health pipeline, particularly because education programs change by the semester or annually	2, 5, 6, 9, 11, 12 & 13. Capacity increased to serve students in health care programs	1, 11 & 14. Regional coordination of health pipeline	
8. Teacher externships developed and offered	8. # of externships offered/year, # of teachers trained/year	7. Heightened the awareness by teachers of resources available to be used to work with students	3. Schools and postsecondary institutions can tailor programs, ramp up programs or scale down programs based on data projections	2, 7, 8, 9, 12, 13,14. Students are better prepared to pursue degrees and careers in health-related fields.	
9. Student work-based learning (e.g., career speakers, site visits, field experience, mock interviews) developed and offered	9. # of students participating/year, # of speakers/year, # of site visits/year, # of mock interviews/year, # of opportunities offered/year	8. Professional development for teachers who have not been trained to teach courses related to health careers	4. Health academy and pathway funding is maintained or increased	1, 4, 5, 8-11, 15. Employers are engaged and active in supporting the pipeline.	

Activities	Outputs <i>Performance Measure/Output</i>	Short	Outcomes - Impact	
			Medium	Long
10. Conferences	10. # of conferences/year, # of attendees/year	1, 10 & 11. Community building for health pipeline stakeholders	7, 8, 10. Improved instruction delivery and methods to enhance student experiences and interest in health careers	3, 4, 6. Under-supplied occupations are targeted
11. IHPC quarterly meetings	11. # of meetings, # of attendees, # of regular partners		7, 8, 10. Updated and strengthened curriculum, and adaptation of curriculum to meet real-time skills needed by employers	7, 9, 12, 13 & 14. More students are engaged and retained in the health pipeline
12. Camps/workshops/seminars for students	12. # of camps/seminars/works hops held per year, # of attendees	12 & 13. Students feel like they belong to a community of learners; become excited about health careers	2, 8, 9, 12, 13. Increase in student retention, persistence and completion of education programs	7, 8, 10. A better prepared workforce: teachers are producing a workforce that is trained and prepared to work in the areas of need
13. Clubs (e.g., Hosa, JUMP)	13. # of club meetings/year, # of attendees/year			1, 4, 5, 10 & 11. Strengthened ties for collaboration between workforce and education providers
14. Articulation agreements	14. # of articulation agreements/year	14. Articulation agreements improve ease of students transitioning from high school to community college to four-year college/university		14. More students complete health-related degrees and certificates and enter local workforce
15. Participation in CA Health Professions Consortium & California Health Workforce Alliance, linking to statewide network	15. # of meetings attended/year			15. Coalition influences state policies concerning health pipelines and workforce training

Leadership and Intermediary Services:

- a. To what extent was IHPC able to create the necessary ***regional infrastructure*** for a network of support and systems change in the Inland Empire? **Activities: 1, 4, 10, 11, 15**
- b. To what extent has IHPC been able to establish a staffed entity with a leadership group and the capacity to ***coordinate efforts to increase and diversify the healthcare workforce pipeline*** among key public, nonprofit and private actors? **Activities: 1-15**

Workforce Pathway Collaboration:

- a. To what extent has IHPC built the ***capacity of partnering organizations*** to strengthen health workforce pathways? **Activities: 2-14**
- b. To what extent has the Inland Empire's health workforce ***shown a change in diversity*** across key occupations? **Unclear how this can be shown since this metric was not tracked.**
- c. To what extent has IHPC been able to ***expand or improve training, internship, externship, mentoring services*** with employers or industry associations? **Activities: 4,5,9, 10**

Strategic Partnerships:

- a. To what extent has IHPC been able to ***engage a diverse range of stakeholders*** across all aspects of health professions development? **Activities: 1, 2,4,5, 10,11, 15**
- b. How has IHPC been engaged in helping communities across the Inland Region ***leverage resources through strategic partnerships***? **Activities: 1, 2,4,5, 10,11, 15**
- c. What ***efficiencies*** have resulted from the establishment of IHPC's strategic partnerships? **Activities: 1-12, 15**
- d. To what extent has IHPC been able to create/foster ***new linkages and communication*** across entities? **Activities: 1,2,4,5, 8, 10, 11, 14, 15**

Policy and Practice Change:

- a. To what extent IHPC has been able to engage its members in ***advocating for policies and practices*** that support health workforce development? **Activities: 1, 11, 15**
- b. To what extent are institutions adopting policies or practices that ***improve academic and career readiness***? **Activities: 1-14**
- d. To what extent has IHPC been able to improve ***workforce diversity efforts*** in the Inland Empire health careers pipeline? **Not sure how this can be shown since this metric was not tracked.**

- c. To what extent has IHPC been able to make ***improvements in the ways workforce entities and systems engage employers?*** **Activities: 1, 4, 5, 7, 8, 9, 10, 11, 12**
- d. To what extent has IHPC been able to build or leverage new investments to ***support training and advancement*** of diverse students along the pipeline? **Activities: 2, 5, 7, 8, 9, 12, 13, 14.** **Unclear how the diversity aspect can be tracked.**

Workforce Pathway Programs:

- a. To what extent has IHPC been able to ***disseminate promising or best practice models*** for health workforce pathway programs? **Activities: 1, 2, 7, 10, 11**
- b. How are health workforce pathway programs engaging and retaining ***diverse and underrepresented youth?*** **Activities: 7, 9, 12, 13**
- c. To what extent are youth pursuing or planning to pursue health careers? **Unclear how this can be shown since this metric was not tracked.**
- d. How many students have been engaged in IHPC's programs and initiatives? **Activities: 5, 9, 12, 13**
- e. How many health employers have been engaged in IHPC's programs and initiatives? **Activities: 1, 4, 5, 8-11**
- f. How many, and what type, of other partners have been engaged in IHPC's programs and initiatives? **Activities: 1, 2, 4, 5, 8, 10, 11, 15**
- c. To what extent was IHPC able to create the necessary regional infrastructure for a network of support and systems change in the Inland Empire? **Activities: 1-15**

Appendix E – K-12 Partnerships

(Appendix F lists partners outside the K-12 system.)

K-12 Educational Partners

School District	School
Chino Valley Unified School District	1. Chino Hills High School 2. Chino High School 3. Ruben S. Ayala High School 4. Don Antonio Lugo High School 5. Woodcrest Junior High School 6. Robert Townsend Junior High School 7. Magnolia Junior High School 8. Canyon Hills Junior High School
Chaffey Joint Union High School District	9. Colony High School 10. Ontario High School 11. Rancho Cucamonga High School 12. Alta Loma High School 13. Etiwanda High School 14. Chaffey High School 15. Los Osos High School 16. Montclair High School 17. Valley View High School
Colton Joint Unified School District	18. Colton High School
Corona-Norco Unified School District	19. Auburndale Intermediate School 20. River Heights Intermediate School 21. Dr. Augustine Ramirez Intermediate School 22. El Cerrito Middle School 23. Corona High School 24. Norco High School 25. Eleanor Roosevelt High School 26. Centennial High School 27. Santiago High School
Etiwanda School District	28. Day Creek Intermediate School 29. Etiwanda Intermediate School
Jurupa Unified School District	30. Patriot High School 31. Rubidoux High School
Lake Elsinore Unified School District	32. Temescal Canyon High School
Moreno Valley Unified School District	33. Vista Heights Middle School 34. Palm Middle School 35. Mountain View Middle School 36. Landmark Middle School 37. Badger Springs Middle School 38. Canyon Springs High School 39. Valley View High School

Murrieta Valley Unified School District Perris Union Unified School District Riverside Unified School District Regional Occupational Programs (ROPs)	40. Vista Del Lago High School
	41. Moreno Valley Learning Center
	42. David Long Regional Learning Center
	43. Murrieta Mesa High School
	44. Paloma Valley High School
	45. Arlington High School
	46. Ramona High School
San Bernardino City Unified San Jacinto Unified School District Temecula Valley Unified School District Upland Unified School District Val Verde Unified School District	47. Polytechnic High School
	48. John North High School
	49. Martin Luther King High School
	50. Grindstaff Community School
	51. Abraham Lincoln High School
	52. Baldy View Regional Occupational Program
	53. Riverside County Office of Education, Career Technical Education
	54. Indian Springs High School
	55. Pacific High School
	56. Cajon High School
	57. San Jacinto High School
	58. Temecula Valley High School
	59. Upland High School
	60. Upland Junior High School
	61. Citrus Hill High School
	62. Val Verde High School
	63. Rancho Verde High School

Appendix F – Key Partners

The following list of education, workforce and “other” partners was compiled through extensive review of IHPC documents shared with the evaluators.

Education Partners:

1. ALPHA Center, UC-Riverside; Biomedical Sciences, UC-Riverside
2. Azusa Pacific University Inland Empire Campus
3. Baldy View Regional Occupational Program (BVROP)
4. Cal State San Bernardino
5. California Baptist University
6. California Community Colleges Chancellor’s Office Centers of Excellence
7. California Preparatory College
8. Claremont Graduate University
9. Colton-Redlands-Yucaipa Regional Occupational Program (CRY-ROP)
10. Crafton Hills College
11. Health Career Connection
12. Inland Empire Job Corps
13. Loma Linda University
14. Moreno Valley College
15. Pacific High School
16. Palomares Academy of Health Sciences
17. Regional Allied Health and Science Initiative/Grossmont College
18. Riverside Community College District
19. San Bernardino Community College District
20. San Bernardino Valley College
21. UC San Francisco
22. UCR School of Medicine
23. University of La Verne
24. Western University of Health Sciences

Workforce Partners

1. Alliance for Education, San Bernardino County Superintendent of Schools
2. American Medical Response Ambulance Service
3. American Red Cross
4. Arrowhead Orthopedics
5. Arrowhead Regional Medical Center
6. Blue Shield of California Foundation
7. Borrego Health Foundation
8. California Community Clinics Association
9. California Dental Group
10. California Medical Clinic
11. Canyon Ridge Hospital
12. Cedar Mountain Post-Acute
13. Central Care Physical Therapy
14. Central Physical Therapy
15. Chino Valley Medical Center
16. Clinica Medica Familiar

17. Community Clinic Association of San Bernardino
18. Community Health Systems Incorporated
19. Community Hospital of San Bernardino
20. Crystal Vision Optometry
21. Donald H Spaulding, OD
22. Empower Physical Therapy and Wellness, Inc.
23. Family Specialty Care Medical Group
24. Family Specialty Care Medical Clinic Group
25. First Sight Optometry
26. Foothill Family Medical Center
27. Hemet Valley Medical Center
28. Inland Empire Adult Day Health Care Center
29. Inland Empire Health Plan (IEHP)
30. Jenmarie Eadie LCSW, Inc.
31. Kaiser Permanente
32. Kaiser Permanente Regional Reference Laboratories
33. Kindred Hospital
34. Kinematics Physical Therapy and Sports Performance
35. Lalama Chiropractic
36. Lechner Chiropractic
37. LifeStream
38. Lifetime Eye Care Optometry
39. LiveWell Therapy
40. Loma Linda University Medical Center
41. Los Angeles County Department of Public Health
42. Luna Spine and Orthopaedic Surgery
43. Mission Adult Day Health Care
44. Motion Medical Group (Dr. Jerry Hizon)
45. Mountain View Care Home
46. NCHS Perris Health Center
47. Neighborhood Healthcare
48. New Hope Free Clinic
49. Office of Abid Hameed Khan, M.D., Nephrologist
50. Office of Dr. Stanley I. Kim, Oncologist
51. OneLegacy
52. Pacific Clinics
53. Park Tree Community Health Center
54. Parkview Community Hospital
55. Pomona Valley Hospital Medical Center
56. Premier Medical Transportation
57. Procare Physical Therapy
58. Rancho Physical Therapy
59. Riverside University Health System – Behavioral Health
60. Riverside University Health System – Public Health
61. Rose Garden Residential Care
62. San Bernardino Medical Society
63. San Bernardino Workforce Development Department
64. San Gorgonio Memorial Hospital

65. Santa Fe Pharmacy
66. Sunflower Therapies
67. Tri-City Mental Health
68. Trinity Ultrasound
69. Upland/Ontario Medical Clinic and Urgent Care
70. Valley OBGYN Medical Group
71. Vineyard Place
72. Yucaipa Animal Hospital

Other

1. BLU Education Foundation
2. California Endowment
3. California Health Collaborative San Bernardino County Tobacco Control Program
4. California Health Workforce Alliance
5. California Hospital Association
6. California Primary Care Association
7. California Prison Health Care Services
8. California Wellness Foundation
9. Chino Valley Fire District
10. Coachella Valley Economic Partnership
11. Coyote Nurses of the Desert
12. Global Healthcare Industry Alliance
13. Healthy Ontario
14. Jobing.com
15. Latino Health Collaborative
16. Los Angeles Area Chamber of Commerce
17. OSHPD
18. Riverside County, Department of Behavioral Health
19. San Bernardino County, Department of Behavioral Health
20. San Bernardino County, Department of Public Health
21. San Bernardino Healthy Communities
22. Services Center for Independent Living, Claremont
23. Susan G. Komen
24. UCLA Health Training Center
25. Valley Star Community Services

Appendix G – Online Survey Write-in Responses on Areas to Improve

2017 IHPC online survey responses:

- Opening more spots in the Spring Conference for students.
- Making sure the website is kept up to date and user friendly. I have often gone searching for information and haven't found it easily.
- More opportunities for pharmaceutical area.
- I would like to work on a joint grant with you to fund more internships for your college students; somehow, collectively we need to scale it so that a good 30 college interns in IE are connected with health employers each summer, I believe organizations such as Health Career Connection can support or unite for that type of initiative and co-brand.
- Equality to all students with or without a contract with you. When that became the driver in your outreach everything about your services changed and followed the money only.
- A way to bring students in the region together to collaborate not to just train or educate them. I feel like the youth are capable of planning and organizing effective, sometimes more effective, opportunities for themselves. It would be great to bring together different programs/groups of students to share what they do or their ideas.
- My experience is limited because my students are based in Riverside County. Often, the opportunities available are outside my student's range of travel or are only open to SB County kids.
- I think they have their hands full with schools and students that want to be a part of it but as this develops I could see the need to reach out to underserved schools that don't have teachers involved to help those students get in on some of the opportunities.
- Continued support and outreach to Adult Education providers.
- I think the development of more sites for our high school students to do a job shadow and or internship. Maybe establish some guidelines for students to apply for an internship., ie minimum requirements, teacher referral etc, and set up a process to find more sites for students to potentially intern at.
- I am a high school counselor and the workshop that I attended was incredibly informative - for teachers. I feel there should be one targeted to counselors.
- Really focusing on advertising your services and programs to the community, student and parent stakeholders. As administrators we get so many emails at times we don't open all of them and they have valuable info parents/students could utilize.

- Clarification if the organization is supporting activities for students enrolled in four year or two year colleges.
- I get a little confused about your organization and the names. I see names like nexus, IHPC, Reach Out and I am not sure if these are all the same organization or related partners. Maybe something that explains the org and the mission to us newcomers.
- More events for youth.
- Continued development of the Innovation Valley Nexus.
- Building a stronger network of participants at the Nexus meetings in southwest regions.
- Your efforts are well received by all throughout the community. Like many of our initiatives, the key is to get more employers to provide work based learning experiences, paid work experiences through WIOA youth funding and paid internships.
- More involvement from health professionals.
- IHPC seems to offer a lot of benefit to the educational system, and to students, but not much benefit to the health system. We are asked to provide site visits, shadowing opportunities, career speakers, etc, but we do not see return on our investment.
- Not so many emails. I get the same emails with too many reminders. Several a day.
- More connections and opportunities for community college students and career explorations and health career experience and exposure. More connections, opportunities and events in the Southwest Riverside County cities and locations (Perris, Menifee, Hemet, San Jacinto, Murrieta, Temecula, Lake Elsinore).
- Bringing programs to Riverside County and include other medical professions like speech therapy, occupational/physical therapy and dietetics.
- We noticed that although the outreach is good, we still have students, parents and communities of color and other ethnicities who have not heard of the wonderful opportunities available to them.
- Behavioral health and all Riverside County school districts.
- I am impressed with the amazing level of opportunity and support IHPC provides. In addition to continuing to develop JUMP program, it would be great to start building awareness in the elementary schools. Also, it's more of a site issue, but I wish colleagues at our other high schools were accessing more of the opportunities IHPC provides.
- As an instructor, my students would benefit greatly with more opportunities for externship sites.

- Increase in internship sites.
- Realizing that not all educators can attend meetings at 3 p.m. when they are an hour and a half away.
- Can IHPC PLEASE include additional learning opportunities for Adult Ed learners? Perhaps, include externship and/or volunteer opportunities to adult students who are in the Health Care Pathways? Also, include teachers (such as myself) in additional training with organizations like the mental health training that took place a few weeks ago?
- Community engagement.
- I feel that IHPC needs to work on marketing the mission, vision, and values of the organization to more High School districts within the Inland Empire in order to open the opportunities that they have to a wider audience that can benefit from it.
- As many externships internships and partnerships as possible...
- Variety of professionals in the Mental Health area.
- While I appreciated the dissemination of news and updates, the amount of information on the weekly/monthly newsletters is often overwhelming with so many opportunities. I suppose it's a good problem to have. Perhaps finding other ways to share information of upcoming events.

Appendix H – Online Survey Additional Recommendations Write-in Responses

The following table contains write-in responses to the question, “What else would you recommend IHPC should do to support health professions pipelines in the region? Any new initiatives we need to embark on?”

Online Survey Write-in Responses on Areas of Improvement	
Work more with ROP instructors	Continue to include all programs and understand there is more than HOSA out there.
	Continue with your great newsletter; hopefully it is sent to health departments and governmental agencies that impact health policy; to congressional offices, etc. to share your good work and continue to press the norm of pipeline engagement. I am completing a health professions asset mapping project for LBUSD and you may be interested in the model.
	Be more inclusive of partners in the process. Meetings, input and consistency.
	I would consider partnering with programs that students that are interested in pursuing college and a career in STEM since students interested in pursuing a career in medicine will possibly gain a STEM degree, like my Upward Bound Math and Science Students of MVC. I would also consider holistic care projects like gardens and nutrition programs.
	It was frustrating to have the Healthcare conference and the HOSA SLC at the same time. Care should be taken to not have this conflict in the future. I would like to offer both to my students.
	Just make sure they have access to health care.
	I fell the organization is doing a great job.
	I think they are on the right track and work hard to engage all stakeholders in the progress. The development of goals each year and then tracking that progress is excellent.
	Inclusion of a broader adult population age group. For example, the HOT program is focused on Adult Students between the ages of 18-24, this age range should be expanded to include the older adult populations looking to upscale their skills with additional education and training or enter the workforce as a career change or veteran.
	I am only peripherally involved with IHPC because of the nature of my job, but I do appreciate the strides they have made in keeping us as informed as possible as to what is happening in the community and opportunities for students.
	Continue with what you're doing. It is very effective.
	How about basic first aid, CERT Training or Food and Nutrition Classes? Investing in training now might pay dividends down the line in an emergency or in making healthy choices.
	I recommend continuing the bootcamps and internships for students. Also, continue programs such as YAHA.
	Rio Hondo has a wonderful nursing program and would be interested to know how you can support their efforts.
	There seems to be a lot of focus on engaging high school students in health professions, but in my experience, the problem lies mostly with College Students not being able to gain acceptance to the programs that they are applying for. We should focus more on College Students and preparing them to be selected for these programs.
	I need to assist and become more a part of the services, teams and committees in the Coalition before I can comment on what needed to be improved.

Online Survey Write-in Responses on Areas of Improvement	
Should/could IHPC support any Barstow-Victor valley efforts with health careers? Not sure. We should invite IHPC to future Healthy High Desert (HHD) meeting to present on work. HHD is regional effort in Barstow-Victor valley to promote health and implementation of CVS priorities for: economy, education, health & wellness and public safety.	
Perhaps organizing community town hall meetings and bringing healthcare employers together to share career opportunities and location developments (i.e. new facilities, new hospitals, clinics, etc.) together to learn more about future industry developments. Have town hall meetings throughout the region, not just Riv and San Bernardino.	
Maybe, contacting the sites and seeing if your information could be placed in the school newspaper or in all of the counselors office.	
More opportunities to work with underprivileged kids	
About coming to different Institutions, school districts, we have nurses, physical therapist, LVNs, and start sending futures students our way. We can also mentor futures health care providers.	
Keep up the good work.	
I am very pleased with IHPC and have no recommendations at this point.	
Website links for beginning programs	
Yes. Schedule tours for H.S. to visit local Adult Ed schools that may offer programs of their interest for a fraction of the cost and also accredited. Students should be aware of CTE programs available to them. IHPC can partner with Adult Ed schools which will stretch out the scholarship awards.	
In addition, most high school students are without transportation so it would be better to have some events in different locations to make it possible for some students to attend the events and make it fair since IHPC events are geared toward the whole Inland Empire area, not just San Bernardino and Rialto.	
OPHTHALMOLOGIST SPECIALISTS SERVICES APPOINTMENT WAITING PERIOD DURATION MAY BE SHORTENED.	
Contract help with Medical and Mental health facilities, if possible.	
IHPC is doing great work in the community. The youth conferences are very valuable and well attended. The monthly meetings are great resources. I don't have suggestions on new initiatives, but rather continue focusing on current initiatives and strengthening and promoting these.	

Appendix I – IHPC Conferences

Conference	Description	Quick Facts	Outcomes
National Innovative Communities (NIC) Conference: Health Professions Track	The IHPC hosted a special Health Professions Track at the NIC Conferences in 2016 and 2017. Participants included Loma Linda University, the Red Cross, Kaiser Permanente, Dignity Health, Western University, and California State University, San Bernardino.	2016: 1,200 attendees. 2017: 1,050 attendees.	This IHPC track provided space to create opportunities for hospital placements equitably across all areas and avoid unnecessary competition between schools.
K-12 Strategies and Solutions Conference: Cultivating Future Health Care Leaders	The two-day conference aimed at providing the tools, relationships and implementable strategies needed to advance the pipeline work. Workshops were structured as working meetings connecting participants to those who are running successful health pathway and academy programs and providing the time and resources to develop concrete action plans.	Hosted in 2008. <i>Networks of support share a common vision of improving the educational and life outcomes of underrepresented minority students.</i>	-better coordinated student-centered support services, family-centered services and, ultimately, the K-20 system. -awareness of the educational and social needs of underrepresented minority youth - action plans to help underrepresented students succeed in college and beyond. - gained information about possible services and programs needed in the community, such as more health academies at high schools, moving from a focus on individual efforts to community-wide focus, and a need for strategic alliances to coordinate and develop strategies. - IHPC pursued the identified opportunities and addressed existing gaps in its work.
Health Career Pipeline Conference	The conference was created for high school counselors. The purpose of the conference was to identify available resources, showcase best practices, and examine how to expand and strengthen the region's health career pipelines.	Conducted in 2009. About 100 attendees, including counselors, hospital administrators, K-12 school district teachers and administrators, and community college	

Conference	Description	Quick Facts	Outcomes
Annual Health Professions Conference for High School Students	<p>The purpose of the conference is to heighten the awareness of health professions among high school students by exposing them to careers in the Region they would have not otherwise considered.</p>	<p>Conducted on annual basis since 2010.</p> <p>Attendance grew from 275 in 2010 and over 600 in 2017.</p>	<p>Student learning outcomes:</p> <ul style="list-style-type: none"> -Awareness of the spectrum of existing and emerging health career opportunities; -Awareness of related training programs, and volunteer and internship opportunities; -Understanding of the college admission requirements. <p>K-20 teachers and administrators learning outcomes:</p> <ul style="list-style-type: none"> -Best practices in the pre-health professionals education; -Funding opportunities; -Potential articulation partners; -Health care industry partners for job shadowing and student internships. <p>Health Care Industry Employers learning outcomes:</p> <ul style="list-style-type: none"> -K-20 educational partners for workforce training opportunities. -Best practices in the educating pre-health professionals, including student volunteer and internship placements. -Funding opportunities.
The Building Primary Care Capacity in the Inland Empire Regional Convening	<p>This Convening was conducted in partnership with the Regional Occupational Programs (ROPs) in the region to identify viable pathways for students from school to career.</p>	<p>Conducted in 2013.</p> <p>The convening included industry panel, ROP and community college presentations and discussions.</p> <p>Partner in presenting the event was the California Health Workforce Alliance.</p>	<p>The conference identified some key areas of focus for the IHPC:</p> <ul style="list-style-type: none"> -Targeted education in K-16, with a focus on health sector; -Need to integrate population health concepts and experiential learning earlier; -Need for a “one stop shop” to coordinate and channel pipeline and pathways development processes;

Conference	Description	Quick Facts	Outcomes
			<ul style="list-style-type: none">-Need for multiple entry points into the health professions;-Need for more systematic sharing and scaling of exemplary practices;-Need for a clearinghouse for industry partnerships.



Appendix J – Online Survey Tool

The following is the format for the online survey that was used for the evaluation.

Inland Health Professions Coalition 10-Year Anniversary Survey

*Required Question(s)

As a valued partner of the Inland Health Professions Coalition (IHPC), your help is being sought to assist with a 10-year retrospective evaluation. Whether you've been a partner of IHPC for ten years or one month, your input is important!

This survey is designed to gather information on the effectiveness and impact of the IHPC's efforts. The findings will serve as a roadmap in continuing to meet the ever-growing need for qualified, locally-sourced health professionals.

Please share your insights freely through this survey. Your responses will not be coupled with your identity in the final report (unless you provide us with your explicit permission), and our team of evaluators will assure this confidentiality.

For the purpose of this survey, IHPC's service area/region is defined as Riverside and San Bernardino counties and the Pomona Valley.

* 1. Please identify yourself:

- I am faculty or an administrator for a K-12 school district
- I am faculty or an administrator for a higher education institution
- I am a representative of a health care industry (employer)
- I am in workforce development and/or training
- Other

[Continue >](#)

LEADERSHIP AND INTERMEDIARY SERVICES

* 2 Have you accessed the following services offered by IHPC in the past 10 years?

	Yes	No	Don't Know
Training workshops (e.g., Teacher Resource Day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher externships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student work-based learning (e.g., career speakers, site visits, field experience, mock interviews)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical support to school sites (e.g., work-based learning)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nexus Group meetings (San Bernardino Metro, West/East End Health Professions, Innovation Valley, Riverside Regional)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IHPC quarterly meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camps or seminars for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clubs (e.g., HOSA and JUMP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical support to employers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***3 How valuable were the services you received/accessed from IHPC?**

	Very valuable	Mostly valuable	Moderately valuable	Somewhat valuable	Not valuable	Don't know/ N/A
Training workshops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher externships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student work- based learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical support to school sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nexus Group meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IHPC quarterly meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camps or seminars for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clubs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Technical support to employers

* 4 In your opinion, how much support does IHPC offer to the region's health professions pipelines?

A great deal of support	A lot of support	A moderate amount of support	A little support	No support
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 5 In your opinion, how much progress has IHPC made in **fostering health professions pipelines** in the region in the last ten years?

A great deal of progress	A lot of progress	A moderate amount of progress	A little progress	No progress
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 How **responsive** is the administration and leadership of IHPC to its network?

Very responsive	Mostly responsive	Moderately responsive	Somewhat responsive	Not responsive	Don't know/ N/A
<input type="radio"/>					

7 Please rate IHPC's effectiveness in **dissemination of best practices** and tool kits.

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

[Continue >](#)

STRATEGIC PARTNERSHIPS

8 How effective has IHPC been in **engaging a diverse group of stakeholders** across health professions?

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't Know/ N/A
<input type="radio"/>					

9. Has IHPC helped you make new employer connections?

Yes

- No
- Don't Know or N/A

10 Please rate IHPC's effectiveness in engaging employers.

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

11. Has IHPC helped you make new connections with the education community?

- Yes
- No
- Don't Know or N/A

12 Please rate IHPC's effectiveness in engaging educational institutions.

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

13. Please tell us about a **successful partnership** that you developed as a result of IHPC's efforts. Who did you partner with and what results have you achieved?

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[Continue >](#)

POLICY & PRACTICE CHANGE

14. Has IHPC helped you in navigating a policy or practice issue?

- Yes
- No
- Don't Know/ Don't Remember

15. Please rate IHPC's effectiveness in advocating for changes **to policies and practices** (such as changing a school district or employer policy to allow more internships). In the comment field, indicate what policy or practice IHPC assisted you with.

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

Comment:

500 characters left.

[Continue >](#)

HEALTH WORKFORCE PATHWAY PROGRAMS

* 16. Please indicate if IHPC's efforts **positively affected** each of the following health professions/occupations:

- Yes
- No
- Don't Know

Primary care professions

-
-
-

Allied health professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency medical professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public health professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavioral and mental health professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dental professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other health professions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17 Please rate the effectiveness of IHPC in **engaging underrepresented youth** in regional health pathway programs.

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

18 Please rate IHPC's effectiveness in bringing new opportunities **to support advancement of students** along the pipeline (e.g., promoting health academies).

Very effective	Mostly effective	Moderately effective	Somewhat effective	Not effective	Don't know/ N/A
<input type="radio"/>					

19 From your observations, how much progress has IHPC made in **helping increase diversity** in the health workforce pipeline in the region?

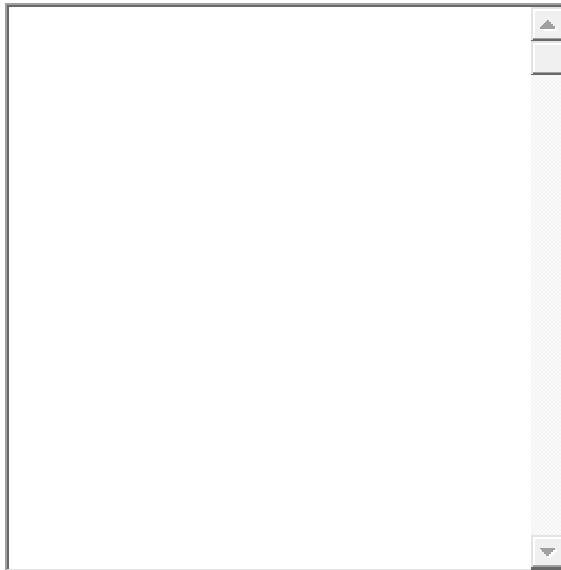
A great deal of progress	A lot of progress	Moderate amount of progress	A little progress	No progress	Don't know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Continue >](#)

FINAL THOUGHTS

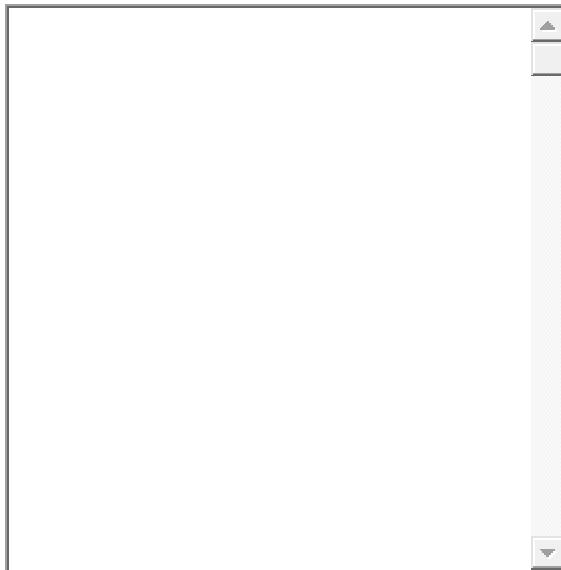
You're almost done! Thanks for hanging in there. Please share your insights and opinions on these final questions.

20. IHPC is committed to continuous improvement. What are some of the **areas that you feel we need to work on?**

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21. What else would you recommend IHPC should do to support health professions pipelines in the region? Any new initiatives we need to embark on?

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350 characters left.

22. Please provide your name and contact information.

*We will **not** share your information, nor will your name or identity be tied to any of your responses, unless you expressly give permission to the research consultant.*

First Name:

A small, empty rectangular text input box with a thin black border, positioned to the right of the 'First Name:' label.

Last Name:

Job Title:

Company Name:

Work Phone:

Email Address:
emailaddress@xyz.com

Appendix K – Phone Interview Survey Tool

Phone Interview Guide

Introduction: As you are probably aware, **the Inland Health Professions Coalition (IHPC)** is conducting a 10-year retrospective evaluation and collecting information about the effectiveness of its efforts.

As part of our work to evaluate IHPC's impact, we are conducting a phone interview with at least 20 individuals to gather additional insights and more in-depth input to supplement the online survey we are conducting.

This phone interview should take no longer than 15-20 minutes and will consist of seven questions. Your participation is greatly appreciated since we hope the information gathered through this process will help guide IHPC for the next 10 years!

Please note: *For the purpose of this survey, IHPC's service area/region is defined as Riverside and San Bernardino counties and the Pomona Valley.*

If response is yes, check box.	
<input type="checkbox"/>	Have you completed the online survey?
<input type="checkbox"/>	Would you like your responses to remain anonymous?

Background Information:

Name _____

Position/Role _____

Organization _____

BACKGROUND

1. Please describe your experience with IHPC (Inland Coalition) in the last 10 years. What are some of the important highlights that stand out from the past 10 years?
2. In the last 10 years IHPC has been striving to achieve a health workforce that is diverse, community responsive and meets the needs of the region's health care employers. In your opinion, how successful has IHPC been in this mission? Please explain or elaborate.

LEADERSHIP & INTERMEDIARY SERVICES

3. What are some of the ways IHPC provided leadership and/or served as an intermediary between the education community and employers to advance the regional health workforce? Please give examples.

STRATEGIC PARTNERSHIPS

4. Please explain how IHPC involved key regional stakeholders to work on common issues related to health workforce pipelines. Please give examples of the most effective and the least effective partnerships that IHPC facilitated.

POLICY & PRACTICE CHANGE

5. Over the years, IHPC has worked at the state, regional and local level to improve policies and practice. This work sometimes involved working closely with school districts or employers. Please describe any policies or practices that created barriers in the past and how IHPC helped address those barriers?

HEALTH WORKFORCE PATHWAYS

6. What are some of the challenges the region has been facing with health workforce pathways? How has IHPC helped the region address these challenges, and what positive changes have you witnessed?
7. In summary, what is the value that IHPC's work brings to the community and the region?

CLOSING

Thank you for taking the time to participate in this phone interview. In closing, do you have any additional comments that you would like to share?

Your responses will be analyzed by our evaluation team and will be valuable as IHPC moves forward assessing its activities and overall effectiveness. We expect a report summarizing IHPC's efforts in the region will be available at the end of the summer. Your contribution to this effort is extremely valuable and greatly appreciated.



Reach Out's mission is to strengthen communities by bringing people together to solve our region's toughest issues: breaking barriers to **educational achievement**, expanding **economic opportunities**, and creating **safe, healthy and innovative communities**.

As an initiative of Reach Out, the **Inland Health Professions Coalition** (IHPC) achieves this mission by addressing the need for health professionals in the Inland Empire and developing a health workforce that is diverse and community-responsive.



REACH OUT
Strengthening Communities



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