The California Advanced Primary Care Institute (CAPCI) Pipeline Workgroup has developed a set of priority objectives to be achieved by the end of calendar year 2014. The Workgroup reviewed and considered extant primary care workforce recommendations in the state, such as those of the California Health Workforce Development Council, California Health Workforce Alliance, and Let’s Get Healthy California.

The principles underlying the CAPCI Pipeline Workgroup objectives include:

- **Impactful**: would measurably improve the primary care workforce in California by increasing entry of new primary care workers, increasing retention of existing workers, and/or enhancing of skills needed for advanced primary care practices
- **Feasible**: could be feasibly implemented in the proposed timeline
- **Focused**: concentrating efforts on a few well-defined objectives rather than an exhaustive list of possible goals
- **Inclusive**: inclusive of workers in the diverse professions and occupations needed for advanced primary care
- **Equitable**: promoting workforce diversity and attention to underserved populations
- **Patient-centered**: oriented to meeting the needs of patients and the public
- **CAPCI-able**: includes a clear, appropriate and influential role for CAPCI, leveraging the assets of CAPCI

The Pipeline Workgroup recommendations are grouped into three categories:

A. **Objectives under the purview of the Pipeline Workgroup**

B. **Objectives under the collaborative purview of the Pipeline and Policy Workgroups**

C. **Objectives under the collaborative purview of the Pipeline and Practice Redesign Workgroups**

**A. Pipeline Workgroup**

1. **Transform curricula in the state’s training programs for Medical Assistants, Community Health Workers/Promotores, and other allied health workers to prepare them to function in advanced team-based models of primary care.**

2. **Establish an Advanced Primary Care Community-Based Training Network, and double the number of health professional students and residents with training experiences in practices that exemplify transformation in primary care.**

**B. Pipeline plus Policy Workgroups**
3. Establish a primary care resident training matching grant program, preferentially administered by OSHPD, to sustain the expansion of primary care residency training positions in California initiated by a federal grant program administered by HRSA that will expire in 2015.

4. Establish a state funding mechanism to sustain new primary care residency programs created by the Affordable Care Act’s Teaching Health Center Program, after federal funding terminates in 2015.

5. Increase funding for loan repayment, scholarships and incentives for Physicians, Physician Assistants and Advanced Practice Nurses, and other health professionals to pursue primary care and practice in urban and rural underserved areas.

C. Pipeline plus Practice Redesign Workgroups

6. Establish a statewide program to build capacity for practice coaching to help transform practices into advanced primary care models that will make primary care a joyful and sustainable career.

Objectives in Detail

1. Transform curricula in the state’s training programs for Medical Assistants, Community Health Workers/Promotores, and other allied health workers to prepare them to function in advanced team-based models of primary care.

   **Rationale:** Advanced team-based models of primary care call for medical assistants and other allied health workers to play a much more active and empowered role in primary care, partnering with clinicians to provide accountable care for a defined population of patients. Examples of some of the key skills required of these workers -
   
   - **Panel Management** – Including identification of preventive and chronic care gaps for patient in a practice and proactively addressing those gaps. This may include overdue immunizations or cancer screening.
   - **Health Coaching** - Applying skills in motivational interviewing to coach patients on behavior change and self-management of chronic conditions.

   Medical assistants, health workers and promotores are particularly well suited to apply these skills in a culturally sensitive manner. Few allied health training programs in California currently include training in these skills in their core curricula. Primary care practices committed to advanced models of care frequently find that newly graduated allied health workers are not prepared for the expanded roles expected in these practice models.

   **Proposal:** The UCSF Center for Excellence in Primary Care (CEPC) has developed curricula for training Medical Assistants and Health Workers in many of the new skills needed for their expanded roles in advanced primary care models. These curricula have been used successfully at several community college training programs, including San Francisco City College and Cabrillo Community College and in on-the-job training.
CAPCI proposes to work in partnership with the CEPC to provide training and assistance to the California Health Workforce Initiative Centers (HWIC) to implement these curricula in their regions throughout California.

Print and electronic versions of curricular modules will be produced and disseminated, including materials suitable for distance learning. CAPCI will conduct outreach to the six HWIC to invite them to participate in “train the trainer” workshops and incorporate the curricula into their programs to equip allied health program faculty to deliver the curricula to train their member community college faculty and evaluate its impact within their region. CAPCI will also partner with the HWICs to identify local high performing sites to accept interns as part of their training.

**Budget:** $300,000 over 2 years to reach the six HWICs statewide and 500 trainees.

2. **Establish an Advanced Primary Care Community-Based Training Network, and double the number of health professional students and residents with training experiences in practices that exemplify transformation in primary care.**

**Rationale:** With sponsorship from a recent grant from TCE, CAPCI commissioned UCSF to perform a study to assess the current state of the medical education environment for primary care in California. The study report, *Education in Primary Care in California’s Medical Schools: Strengths, Challenges, and Opportunities*, concluded that the single most prominent gap identified by medical educators and trainees was the -

- “Difficulty in finding opportunities for students to have clinical training experiences in high-functioning primary care settings and engage with satisfied, happy primary care providers.”

The report recommended that CAPCI work to “Increase partnerships between medical schools and team-based, high-functioning community-based primary care practices to ensure that students are trained in advanced primary care settings using new models of team-based care.” This recommendation is equally applicable to nursing, physician assistant, pharmacy, and other health professional students. Simply put, you cannot teach great primary care if you are not practicing great primary care.

Teaching clinics at traditional academic health centers do not always exemplify the attributes of advanced primary care. Many of the practices in California that have come the farthest in implementing advanced primary care models are community-based practices, including community health centers and medical groups in integrated delivery organizations, that have not been engaged as partners in health professions education (e.g., serving as sites for precepting students for clinical clerkships).

**Proposal:** CAPCI will facilitate development of an Advanced Primary Care Community-Based Training Network in California. Key elements will include:

- Identifying community-based practices committed to advanced primary care models, cultivating their interest in serving as clinical teaching sites for health professions students.
- Serving as an educational “broker” to link these practices with training program directors at health professions schools in their region.

To facilitate network engagement, CAPCI will develop a tool kit that addresses the types of issues that commonly arise in considerations of community-university educational partnerships, such as concerns about decreased clinical productivity when students are present, potential benefits to community sites from hosting students (e.g., enhanced clinician work satisfaction and retention), faculty development for
community preceptors, and related issues.

**Budget**: $500,000 over 2 years to engage training sites with at least 15 advanced primary care practices not previously engaged to a large degree in health professions education. These sites will provide at least 100 health professions students training experiences in primary care.

3. **Establish a primary care resident training matching grant program, preferentially administered by OSHPD, to sustain the expansion of primary care residency training positions in California initiated by a federal grant program that will expire in 2015.**

**Rationale**: For primary care physician supply, the rate limiting pipeline step is residency training. Despite growing numbers of medical school graduates in the US, until recently California has had very little increase in the number of primary care residency positions. In 2010, the Health Resources and Services Administration implemented a grants program to infuse a one-time flow of funds to expand the number of residency positions in primary care fields. The program provides funding of resident salaries and benefits to training programs adding new positions for the FY2010-15 period, prioritizing programs with a track record of producing primary care physicians serving underserved communities. The funding ends after 2015 and HRSA has made it clear that there will not be another cycle of federal funding to sustain these added positions. Eight residency programs in California programs were awarded expansion grants, increasing the annual production of primary care physicians by 20 (7 in family medicine, 6 in internal medicine, and 7 in pediatrics). Because of the 3-year duration of residency training in primary care, the expansion grants fund 60 positions annually in California to produce 20 additional graduates (i.e., 1/3 graduate every year). Loss of these expansion positions after 2015 would be a serious setback for the state’s effort to increase primary care physician supply for underserved communities.

**Proposal**: California should establish a matching grant program to sustain the primary care residency program expansion positions. This program could be administered through the existing Song-Brown Primary Care Training Grant Program operated by OSHPD. The program could be designed as a challenge grant program, whereby funds administered by OSHPD would need to be matched by an equal amount of funding by the sponsoring training institution and its partners to qualify for awards. The challenge grant approach would serve to demonstrate the training institution’s own commitment to the residency expansion, and also provide an opportunity for institution’s to develop strategies for long-term sustainability should the challenge grants be phased out in the future. OSHPD could consider various sources of funds for the state portion of the training grants, including existing OSHPD fee programs that support the Song-Brown program, contributions from health plans and health delivery organizations, and private philanthropy. CAPCI has a key role to play both in policy advocacy, and also in working with CAPCI members to explore innovative and collaborative options for funding mechanisms engaging key health system stakeholders that depend on a robust primary care workforce.

**Budget**: Cost per resident position is approximately $75,000, and the challenge grant would fund half of this amount ($37,500). Matching grants for all 60 positions would require $2,250,000 per year starting in 2015.

4. **Establish a state funding mechanism to sustain new primary care residency programs created by the Affordable Care Act’s Teaching Health Center Program, after federal funding terminates in 2015.**

**Rationale**: In addition to the primary care residency expansion grants, HRSA administers the Teaching Health Centers program authorized and funded by the ACA. This program funds community health
centers and other non-hospital community entities to expand existing primary care residencies or start new primary care residency programs. Four grants have been awarded to California community-based residency programs, all in family medicine. The awards end in 2015 and Congress would need to appropriate new funds to sustain the program beyond 2015.

Proposal: Similar to objective #3. The state needs to identify sources of funding to sustain these residency positions

Budget: more research is being done to determine exact number of positions funded in California and cost of maintaining these positions

5. Increase funding for loan repayment, scholarships and incentives for Physicians, Physician Assistants and Advanced Practice Nurses, and other health professionals to pursue primary care and practice in urban and rural underserved areas.

Rationale: The substantial and growing income gap between primary care and non-primary care fields, especially in medicine, is a major deterrent to new graduates electing careers in primary care, especially in the face of exploding education debt loads. California has several scholarship and loan repayment programs, including ones administered jointly with the federal government that should be expanded to reach more health professionals.

Proposal: Similar to objectives 3 and 4.

Budget: Pipeline Workgroup is conducting an inventory of existing state-administered and state-funded loan repayment programs to be determine current investment and extent of additional need

6. Establish a statewide program to build capacity for practice coaching to help transform practices into advanced primary care models that will make primary care a joyful and sustainable career.

Rationale: Finding joy in practice is essential to attract new graduates into primary care and retain existing primary care practitioners. Some studies have demonstrated that transformed models of primary care result in greater work life satisfaction and lower burnout.

Proposal: See Practice Redesign Workgroup proposal on statewide practice coaching infrastructure.

CAPCI Pipeline Workgroup Members:

Kevin Grumbach, MD – UCSF Department of Family and Community Medicine
Debra Bakerjian, PhD, RN and Heather Young, PhD, RN – UCD Betty Irene Moore School of Nursing
Maggie Chen, UCLA Medical Student
Kathy Flores, MD, Latino Center, UCSF Fresno
Callie Langton – CAFP
Kevin Lohenry, PhD, PA-C – Keck School of Medicine of USC
Angela Minniefield, MPA – Charles R. Drew University of Medicine & Science