The League of Women Voters, Redding Area has been working on a study of health issues in Shasta County since May 2013. In May 2016, a position based on that study was presented to the membership and adopted at the Annual Meeting. This report is the documented results of the study to support and clarify the position.

Our adopted position addresses issues related to prevention of disease and illness, health education programs and accessibility to health services. In completing our study, the committee researched and discussed many areas of health and wellness that affect our county. We sought experts in these fields to share their knowledge and completed hours of research to determine our position. The summary of that research is presented in this document to guide future actions that may help to improve the health of our community.

Currently, Shasta County is ranked #50 out of 57 of California’s counties on health issues. Our health outcomes are rated poor or fair. Although we have ample opportunities for exercise, our health behaviors show higher than state averages for physical inactivity. We also have high levels of adult smoking, obesity, and excessive drinking of alcohol.

Repeatedly, we were drawn to the impact of the Affordable Care Act in the areas of interest supported in our position. The ACA supports wellness and the prevention of illness and diseases with a variety of services to support individuals and families. These include physical examinations and screenings as well as dental and vision services.

Prior to the implementation of the ACA, there were 38,000 persons covered under Medicaid (MediCal in California) in Shasta County. Since implementation, there are now nearly 65,000 residents covered. These medical services benefit the entire county and bring in revenue of over $125,000,000 each year. The loss of this program would have a very detrimental effect on our communities in Shasta County as well as an impact on the local economy. At the same time, our medically uninsured rate dropped from around 24 percent to around 8 percent.

Our research shows that there are continuing problems in accessibility of services. The recruitment and retention of health professionals remains an ongoing problem for our county as well as throughout the state. The larger metropolitan areas have more opportunities for higher salaries and are more desirable for many new physicians and their families.
This issue of physician shortages is being addressed in numerous ways and is not just an issue for our area. The financing required to attend medical schools is a major factor in preventing more young physicians from locating in rural areas. They may graduate in debt for hundreds of thousands of dollars and must seek the highest paying jobs to be able to repay that debt. The metropolitan areas and major hospitals are better able to provide the salaries that young professionals require.

Our county offers several excellent programs for medical interns and residents but upon graduation from these programs the need to get a better paying job requires them to leave the area. If the spouse of the young physician is also professionally trained, the need to move to a more cosmopolitan area is increased. Our county does not offer a variety of positions for people trained in the fields of math and science, for example. The opportunities for advancement are limited. The U.S. Department of Health and Human Services predicts there will be a short supply of primary care physicians nationwide by 2020, and demand is projected to grow due to the aging population. Members of the medical community in Shasta County have several programs in place to draw medical school graduates to the area, and to encourage and support local young people who want to enter the medical field.

The Family Medicine Residency Program at Shasta Community Health Clinic (SCHC) is a fully accredited three-year continuity training program based at the clinic. The program currently sponsors six family practice residents. The program shares inpatient-training rotations at Mercy Hospital with the Mercy Family Medicine Residency Program. Inpatient experience includes in depth experience with internal medicine, pediatrics, obstetrics and surgery.

The residents spend three years at SCHC and assume progressively more responsibility for a panel of patients at SCHC. Community rotations in homeless and street medicine, addiction medicine, home visits, institutional care and nursing home care give residents a broad picture of "bringing medicine to the patient" that is at the core of the family medicine ethic.

Medical students from UC Davis and many other osteopathic and allopathic medical schools in the country rotate regularly through the residency.

The Shasta Community Health Center Post Graduate Nurse Practitioner/Physician’s Assistant Fellowship Program is specifically designed for newly graduated and licensed NPs and PAs in the practice of primary care within the Community Health Clinic setting. The Fellow who has completed the program will be evaluated for competency and awarded a completion certificate. The Post Graduate Fellowship Program is a non-
accredited post-graduate training program and is funded by SCHC and various grants.

Shasta Community Health Center is a participant in the University of California’s “Programs In Medical Education” or PRIME, which is designed to produce physician leaders who are trained in and committed to helping California’s underserved communities. Shasta CHC, as an academic partner with the University of California, Davis School of Medicine is ideally suited to provide a rural outpatient experience in pediatrics and general primary care. Shasta CHC exposes the UCD PRIME medical student to demanding pathology, combined with psycho-social challenges often found in rural communities where the primary care clinician plays an even greater critical role in helping patients manage their health. Shasta CHC also offers a wide array of other potential experiences including outreach to the homeless.

On a case-by-case basis, Shasta Community Health Center sponsors students at various levels of the health professions spectrum, from medical FNP-PA students to early pipeline programs at the high school level primarily through the Shasta-Trinity Regional Occupational Program (ROP-High School).

Shasta Community Health Center works with the Shasta Union High School District Adult Registered Dental Assistant Program as a means to support students interested in dental careers.

Shasta Community Health Center has a working relationship with the University of California, San Francisco School of Dentistry. Senior dental students are able to sign up for a three week rotation whereby they work with SCHC’s dentists and experience life in our dental clinics and in the Redding/Anderson area in general. These rotations happen almost every month throughout the year and are coordinated by the UCSF School of Dentistry for their students. Shasta Community Health Center assists these students by providing living arrangements here in Redding.

Shasta Community Health Center was one of the original partners, along with the Northern California Dental Society, in helping to establish the School of Dental Hygiene based at Shasta College. The school and Shasta Community Health Center’s main dental clinic in Redding share a floor of a commercial building where education and oral health services are provided. SCHC also provides clinical work experiences for the dental hygiene school.

All three locations of Shasta Community Health Dental Centers are fully accredited by the Committee of Dental Accreditation to provide post-graduate dental education through Lutheran Medical Center Post Graduate Advanced Education General Dentistry (AEGD) Program. Each year SCHC strives to have three one-year residents that start their program the beginning of July.
Shasta Community Health Center has a long-standing relationship with the Shasta College Licensed Vocational Nurse Program. SCHC assists the college in the clinical experience of students.

Shasta Community Health Center also has a long-standing relationship with the Institute of Technology LVN-MA program. SCHC assists the college in the clinical experience and training externships of students.

Shasta Community Health Center has developed a linkage with the Chico State Registered Nursing Program and provides some selective placement for students as part of their clinical training.

Shasta Community Health Center works with the SMART Business Resource Center in providing on-the-job training and work experience opportunities for participants: Work Experience Programs (Worksite Trainings and WEX).

Mercy Medical Center/Redding is the primary inpatient teaching location for rotations in Medicine, Pediatrics and Obstetrics. Shasta residents participate in hospital call, lectures and rounds with Mercy Redding Family Medicine Residency. Shasta residents have hands-on experience during the Surgery rotation at Shasta Regional Medical Center. Further obstetric experience is available at St Elizabeth's Hospital in Red Bluff. All residents spend time in:

- OB/Level 3 NICU
- Level II Trauma Center
- Regional Cancer Center
- Open Heart Surgery
- Pediatrics

Mercy Medical Center/Redding is affiliated with University of the Pacific, Simpson University, and the University of California—Davis and serves as a training site for pharmacy IPPE/APPE student, nursing students and a family medicine residency. The Pharmacy General Practice Residency is a 12-month experiential learning process designed to give the resident comprehensive training in providing pharmaceutical care in an integrated health system. Under the direction of the medical staff, the pharmacists are active in a number of pharmacist-managed drug protocols. The Rock Solid Nursing Residency program is for the newly graduated Registered Nurse and has been in existence since 2011. The program is 12-16 weeks long with progressively independent functioning in clinical nursing areas as a key component. The Family Practice Residency program began in 1975 and utilizes a competency based educational experience that prepares residents for practice.
The Northstate Emergency Medicine Fellowship program at Mercy Medical Center Redding is the only such program found west of the Rockies. The one-year intensive training program is approved by the American Board of Physician Specialties with a pathway that leads to Board Certification in Emergency Medicine.

The California Area Health Education Consortium Program, (AHEC), a thirty-year-old organization of partnerships, brings together community and academic interests to improve access to health care and decrease health disparities. Each AHEC develops, with its partners, a population-based approach to health professions education with a special emphasis on community-based training.

Supported by HRSA grant #5U77HPO3015-05 and the state of California, the AHEC Program accomplishes its mission through a network of ten California AHEC centers, each located in an underserved area and affiliated with, but separate from a health professions school. Each AHEC is an independent organization located in the community and serves a specific region; each is run by a community board of directors. Most centers have developed programs and resources in addition to the state and HRSA support provided by the AHEC program.

The Northern California AHEC is housed at the Health Alliance of Northern California (HANC). HANC is an alliance of 12 Federally Qualified Health Centers (FQHCs), lookalikes, non-profit rural health clinics and Indian health centers located in the rural counties in far Northern California. In addition to working with high school students in rural and frontier regions of California, the North California AHEC provides housing support for medical students completing rural CHC rotations; supports Shasta Community Health Center’s Family Medicine Residency and offers continuing education on team based care, PCMH, ACA and other disease specific topics.

The Northern California AHEC provides a health careers orientation workshop at local high schools, introducing students to the many opportunities in health care. Supplementing school workshops, the Northern California AHEC sponsors an annual Health Careers Day bringing in students from outlying areas. Career days provide experiential learning stations with local health professionals, where students have the opportunity to practice CPR, perform laparoscopy on a pumpkin, do physical therapy exercises and even tour a portable morgue. Northern California AHEC also hosts field trips for interested students to visit educational facilities, like UC Davis Medical School and the Rural Health Sciences Institute, which specializes in nursing education and includes a state of the art simulation lab.

Many physicians after years of private practice are joining larger health organizations such as Dignity Health to save on operating expenses. They are able to maintain their level of practice but under the umbrella of a much larger organization to handle insurance
and other practical operations. There are also a number of physicians retiring or moving to other locations after many years of practice. The reasons for relocation vary but it is often stated that the regulations, fees and insurance practices are difficult to operate within a private practice in our state.

The increase in the number of Family Nurse Practitioners and Physician Assistants has helped provide health care to more patients than a single physician can serve. It is expected that this number will increase even more in the coming years as the number of physicians in our area decreases.

Other methods of providing health care are being used such as online diagnosis and technological advances which allow patients to see doctors many miles away from where they live. This technology will be used even more in the future as the field develops.

The advancement of education and better paying jobs in our county will greatly benefit our access to health care. There is a need to improve the education levels of our residents and the opportunities for employment at all levels. Changing the cultural norms and reducing problems such as family violence, drug abuse and child neglect will benefit all of us. The health of our community depends on the health of the individuals within the community.

The difficulties we encountered in completing this study included the broad scope of the issue. There are many factors involved with providing health care and even more factors involved in educating people to access health care.

The area in which we live has suffered for many years with a declining economy and a depressed population. There is a diminishing middle class with jobs that allow families to maintain a standard of living that supports education and health. The gap between people at a high level of income and those below the minimum standard remains steady. Without an improvement in overall employment opportunities, it will be difficult to make the changes that support a healthy environment.

NOTES with Glossary

PRIMARY CARE

DOCTOR OF OSTEOPATHY -- Four years osteopathic medical school, where the focus is on prevention. They perform osteopathic manipulative treatments, a series of
hands-on techniques used to help diagnose illness or injury and assist the body toward self-healing. After OMS, they can go on to train in other specialties.

**FAMILY PHYSICIAN** -- Medical doctors with three years post graduate training in Family Medicine; the focus is on the entire family, including pediatrics and OB/GYN care. They are required to take ongoing medical education courses throughout their career.

**GENERAL PRACTITIONER** -- Older, little used term for physicians with no post graduate training.

**INTERNIST** -- Medical doctors with three years post graduate training in Internal Medicine; the focus is on disease facing adults. Also are required to take ongoing medical education courses throughout their career.

**NURSE PRACTITIONER** -- Nurse practitioners are registered nurses with graduate education in nursing. Most nurse practitioners have a master’s degree, which requires at least two years of full-time study beyond the bachelor’s degree in nursing. Nurse practitioner educational programs include graduate courses in health sciences (e.g., pathophysiology, pharmacology, epidemiology) and courses in the diagnosis and clinical management of health and illness. Nurse practitioners can prescribe medications, including controlled substances, in all 50 states. In 26 states, nurse practitioners have authority to practice independently. They perform comprehensive and focused physical examinations; diagnose and treat common acute illnesses and injuries; provide immunizations; manage chronic health problems; order and interpret diagnostic tests such as X-rays and EKGs, as well as laboratory tests; perform procedures; and educate and counsel patients and their families regarding healthy lifestyles and health care options.

**PHYSICIAN’S ASSISTANT** -- PAs are certified as medical generalists with a foundation in primary care. Most programs are approximately 26 months (three academic years) and require the same prerequisite courses as medical schools. Most programs also require students to have about three years of healthcare training and experience. Students take courses in basic sciences, behavioral sciences and clinical medicine across subjects such as anatomy, pharmacology, microbiology, physiology and more. They then complete a total of more than 2,000 hours of clinical rotations in family medicine, internal medicine, obstetrics and gynecology, pediatrics, general surgery, emergency medicine or psychiatry.

Before they can practice, PAs who graduate from an accredited program must pass the PA National Certifying Exam and get licensed by the state they wish to practice in. In order to maintain certification, PAs must complete a recertification exam every 10 years. PAs can practice autonomously or in a collaborative relationship with other members of a
patient’s healthcare team. Like physicians and NPs, PAs must complete extensive continuing medical education throughout their careers.

**DENTAL HEALTH**

**DENTIST** -- A dentist is a practitioner of dentistry, pertaining to the oral cavity. Nearly all dental schools require at least a bachelor's degree (4 years of college). Most dental schools will be four years of training, however, some states require dentists to complete a post graduate residency program as well. Additionally, dentists are required to participate in continuing education.

**ENDODONTIST** -- Endodontics is the branch of dentistry which is concerned with the morphology, physiology and pathology of the human dental pulp and periradicular tissues. Most programs offer two or three years of advanced training, which leads to a certificate or Master of Science degree in Endodontics.

**ORAL SURGEON** -- A dental specialist whose practice is limited to the diagnosis, surgical and adjunctive treatment of diseases, injuries, deformities, defects and esthetic aspects of the oral and maxillofacial regions. A DDS or DMD degree is required to enroll in an OMS program. Oral and maxillofacial surgeons study four major surgery areas: trauma, pathology, orthognathic surgery and reconstructive surgery. Minimum OMS training is four years.

**ORTHODONTIST** -- A dental specialist whose practice is limited to the interception and treatment of malocclusion and other neuromuscular and skeletal abnormalities of the teeth and their surrounding structures. Most programs are two or three years in length and offer a certificate and some offer an advanced degree option coupled with the certificate. Training is also required in applied and radiographic anatomy, biomechanics, physics, biostatistics, research design, orthodontic technique, diagnosis, treatment planning, growth and development.

**PEDODONTIST** -- (also known as a pediatric dentist) is a dentist specializing in childhood dental health and care. Specializing in pediatric dentistry requires a two-year residency program after graduation from dental school. Consisting of deeper scientific studies along with hands-on experience, the core areas of study include child development and psychology, caring for patients with special needs, oral/facial trauma care, and general anesthesia and conscious sedation.

**PERIODONTIST** -- Periodontics is that specialty of dentistry which encompasses the prevention, diagnosis and treatment of diseases of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function and aesthetics of these structures and tissues. Most programs are three years in length and offer a
certificate. Other advanced degrees may be coupled with the certificate program, either on an optional or required basis upon completion of the program.

**DENTAL ASSISTANT** -- Dental assistants receive their formal education through academic programs at community colleges, vocational schools, technical institutes, universities or dental schools. Graduates of these programs usually receive certificates. Most dental assistants who choose to become nationally certified take the Dental Assisting National Board's (DANB) Certified Dental Assistant (CDA) examination.

**DENTAL HYGIENIST** -- Dental hygienists receive their education through academic programs at community colleges, technical colleges, dental schools or universities. Dental hygiene education programs offer clinical education in the form of supervised patient care experiences. Additionally, these programs include courses in liberal arts (e.g., English, speech, sociology and psychology); basic sciences (e.g., anatomy, physiology, pharmacology, immunology, chemistry, microbiology and pathology); and clinical sciences (e.g., dental hygiene, radiology and dental materials). Dental hygienists are licensed by each state to provide dental hygiene care and patient education.

**MENTAL HEALTH**

**PSYCHIATRIST** -- A medical doctor (M.D. or D.O.) who specializes in preventing, diagnosing and treating mental illness. Four years of medical school is followed by a one-year internship and at least three years of specialized training as a psychiatric resident. As a doctor, they are licensed to write prescriptions; many mental disorders can be treated effectively with specific drugs.

**PSYCHOLOGIST** -- Psychologists have doctoral degrees (PhD, PsyD, or EdD) in psychology, which is the study of the mind and behaviors. Following graduate school, a psychologist completes a two to three year internship. Licensed psychologists are qualified to do counseling and psychotherapy, but since they are not medical doctors, in most states, they cannot write prescriptions or perform medical procedures.

**LICENSED MENTAL HEALTH COUNSELOR** -- A mental health professional who has a master’s degree (MA) in psychology, counseling or a related field. After graduate school, in order to be licensed, the professional counselor must have two years’ experience working with a qualified mental health professional. A counselor may evaluate and treat mental problems by providing counseling or psychotherapy.

**CLINICAL SOCIAL WORKER** -- Clinical social workers have at least a master’s degree in social work and train to be able to evaluate and treat mental illnesses. Social workers can provide case management and hospital discharge planning as well as work as an advocate for patients and their families.
PSYCHIATRIC OR MENTAL HEALTH NURSE -- Depending on their level of training and certification, some nurses can evaluate patients for mental illness and provide treatment in the form of psychotherapy. In some states, they are licensed to prescribe and monitor medications, sometimes independently and sometimes under the supervision of a medical doctor. Nurses also provide case-management services and serve as patient advocates.

THE DIFFERENCE BETWEEN COUNSELING AND PSYCHOTHERAPY -- Counseling focuses on specific issues and is designed to help a person address a particular problem, such as addiction or stress management. Psychotherapy is more long-term than counseling and focuses on a broader range of issues. The goal is to help people feel better equipped to manage stresses, understand patterns in their behavior that may interfere with reaching personal goals, have more satisfying relationships, and better regulate their thinking and emotional responses to stressful situations. Some forms of psychotherapy are one-on-one with a therapist, while others are group-based or family-based.

References
Dr. Andrew Deckart, Shasta County Public Health Officer  www.co.shasta.ca.gov
Dean Germano, CEO, Shasta Community Health Clinic  www.shastahealth.org
Donnell Ewart, Director of Public Health  www.co.shasta.ca.gov
Doreen Bradshaw, Executive Director, Health Alliance of Northern California (HANC); Health Alliance of Northern California Report, July 2016  www.thehanc.org
League of Women Voters, Kitsap County, Washington, Health Survey
California Health Interview Survey, 2015
County Health Rankings and Roadmaps, (Robert Wood Johnson Foundation and PHI University of Wisconsin)
SHOW: Survey of the Health of Wisconsin
Mercy Medical Center Community Benefit FY 2016 Report and FY 2017 Plan; Community Need Index made publicly available by Dignity Health and Truven Health Analytics  www.dignityhealth.org/mercy-redding
American Academy of Family Practice  http://www.aafp.org

University of California, Davis School of Medicine
http://www.ucdmc.ucdavis.edu/mdprogram/rural_prime/about.html

North State Emergency Medicine Fellowship  www.nsemfellowship.com
California Area Health Education Consortium  http://www.cal-ahec.org

Record Searchlight articles on local health care issues 2013-2017

League of Women Voters United States Health Care Position

League of Women Voters California

**LWVRA  Members of the Health Study Report Committee**

Karen Frost, Chair, Marlys Barbosa, Pam Crowe, Art McBride and Michele Schroeder