February 2010

CENTER FOR THE HEALTH PROFESSIONS

Staffing Patterns in California's Licensed Community Clinics: Registered Nurses, Licensed Vocational Nurses, and Medical Assistants

Tim Bates and Susan Chapman
The Center for the Health Professions at UCSF

Overview

This issue brief is the second in a series of briefs examining staffing patterns in California's licensed community clinics.[i] Building upon previous analyses of Medical Assistant (MA) utilization by clinics, this brief expands to include data describing utilization of Registered Nurses (RN) and Licensed Vocational Nurses (LVN) over the period 2005-2008.

We found that the proportion of clinic sites reporting utilization of RNs and LVNs generally did not change during this period, while use of medical assistants has steadily expanded. LVNs are more widely used by clinic sites that are considered rural. The most common staffing pattern is the RN-MA together or an MA alone. The use of MA-only staffing appears to be an emerging trend.

Additional research on staffing patterns, wages, and the relationship of selected clinical support staff to primary care providers is needed in order to better understand the dynamics of community clinic staffing models.

Definition of the Database

California's licensed community clinics are regulated by the state's Department of Public Health. These clinics file utilization data reports with the California Office of Statewide Health Planning and Development (OSHPD) on an annual basis. These reports include data describing the types of clinical provider staff[1] and clinical support staff[2] utilized by the clinic site, and serve as the basis for the analysis presented in this issue brief.[3]

We were interested in potential differences in utilization based on geography. We geo-coded clinic addresses to identify sites located in rural parts of the state. Our definition of a *rural clinic* is based on whether or not the clinic site is eligible for federal, rural-based grants.[4]

RNs, LVNs and MAs do not typically work in clinics specializing in either oral or mental health services. Therefore, we excluded clinic sites that deliver primarily oral or mental health services.[5]

Data Limitations

Licensed community clinics represent only a portion of the universe of community clinics in California.[6,7] The types of clinics not identified by these data include: for-profit clinics operated by private providers; clinics operated by any federal, state, or local government agency or entity (including counties and cities); tribal clinics located on federally recognized tribal land; and clinics that are owned and operated by hospitals.[8] Findings from this analysis may not be generalizable to other types of community clinics.

The data suggest that not all community clinic sites consistently report utilization data from one year to the next. Between 2005 and 2008, 1,048 unique clinic sites reported utilization data, only 70% of these sites reported data in all four years. Unless otherwise noted, the analysis presented in this brief includes all clinic sites that have reported data in any of the four years. As such, the data are cross-sectional and suggest general patterns (as opposed to distinct longitudinal trends).

[i] Go to: http://futurehealth.ucsf.edu/Public/Publications-and-Resources/Content.aspx?topic=The_Utilization_of_Medical_Assistants_in_California_s_Licensed_Community_Clinics

These data are self-reported and although audited by OSHPD, there may be errors in data entry.

Utilization of RNs and LVNs

Table 1 presents the percentage of clinic sites reporting RN, LVN, or medical assistant (MA) use over the period 2005-2008.

Table 1. Utilization of RNs, LVNs, or MAs in California's Licensed Community Clinics: 2005 – 2008

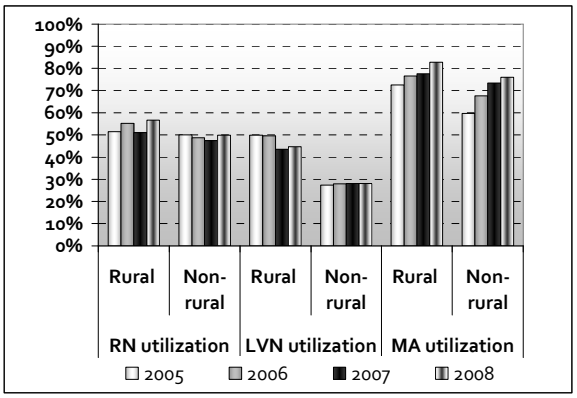
	2005	2006	2007	2008
Total clinic sites	765	802	812	842
RN utilization	50.3%	49.9%	48.2%	51.1%
LVN utilization	31.5%	31.8%	30.8%	31.0%
MA utilization	62.0%	69.2%	74.3%	77.2%

Source: Office of Statewide Health Planning & Development

Table 1 data illustrate two findings. First is the increasing number of clinic sites reporting patient encounters each year between 2005 and 2008. Second, the proportion of clinic sites utilizing either RNs or LVNs remained stable during this period, while the proportion of clinic sites reporting the use of Medical Assistants (MAs) increased in each year.

Figure 1 presents the percentage of clinic sites each year reporting either RN, LVN, or MA use, by rural/non-rural status.

Figure 1. RN, LVN or MA Utilization by Rural/Non-rural status: 2005 – 2008



Source: Office of Statewide Health Planning & Development

Figure 1 illustrates a difference in the utilization of LVNs based on a clinic site's rural/non-rural status. Rural clinic sites[9] are far more likely to report LVN use compared to non-rural clinics. The difference in MA utilization based on a clinic site's rural/non-rural status grew smaller over time, although the proportion of rural clinic sites reporting MA use has been consistently higher. For RNs, there is effectively no difference in general utilization comparing rural and non-rural clinic sites.

Staffing Patterns in Community Clinics

Tables 2 through 4 describe staffing patterns in community clinics for RNs, LVNs, and MAs, whether alone or in combination with one another. Table 2 focuses on clinic sites that reported RN use (all clinics that reported the use of RNs in the given year). Table 3 focuses on sites that reported LVN use and Table 4 on MA use. The clinic sites represented in each table are not mutually exclusive.

Using Table 2 as an example, the data should be interpreted in the following way: for all clinic sites in a given year that reported the use of an RN, what proportion reported staffing with RNs only, what proportion reported staffing RNs and LVNs together but no MAs, and what proportion reported staffing all three (RN, LVN and MA) together?

Table 2 data describe community clinic staffing from the perspective of RN use. The percentages represent the share of all clinic sites in a given year that reported RN use, by the specific staffing pattern. For example, "RN only" indicates that a clinic reported the use of RNs, but not the use of LVNs or MAs.

Table 2. RN Staffing Patterns in Community Clinics: 2005 – 2008

Staffing combination	2005	2006	2007	2008
RN only	24.4%	20.0%	15.9%	16.0%
RN/LVN	7.3%	6.5%	6.6%	4.9%
RN/MA	40.0%	42.3%	47.1%	48.6%
RN/LVN/MA	28.3%	31.3%	30.4%	30.5%

Source: Office of Statewide Health Planning & Development

Table 2 data illustrate several findings. Over time, clinic sites reporting any RN staff have less frequently reported RN-only staffing. The data also demonstrate that when clinic sites use RNs, they seldom use an RN and LVN together (without also using an MA). By contrast, clinics have increasingly reported the use of RNs in combination with MAs. It is the most frequently reported staffing pattern for clinic sites utilizing RNs.

Table 3 data describe community clinic staffing from the perspective of LVN use. The percentages represent the share of all clinic sites in a given year that reported LVN use, by the specific staffing pattern.

Table 3. LVN Staffing Patterns in Community Clinics: 2005 – 2008

Staffing combination	2005	2006	2007	2008
LVN only	17.0%	14.1%	12.0%	10.3%
LVN/RN	11.6%	10.2%	10.4%	8.0%
LVN/MA	26.1%	26.7%	30.0%	31.4%
LVN/RN/MA	45.2%	49.0%	47.6%	50.2%

Source: Office of Statewide Health Planning & Development

Table 3 data illustrate a pattern where clinic sites that report using LVNs less frequently report the use of LVNs only. These data also show the limited and declining frequency of the RN-LVN pattern (reflected in Table 2), and that when LVNs are utilized by community clinics, they are most often used in combination with both RNs and MAs.

Table 4 data describe community clinic staffing data from the perspective of MA use. The percentages represent the share of all clinic sites in a given year that reported MA use, by the specific staffing pattern.

Table 4. MA Staffing Patterns in Community Clinics: 2005 – 2008

Staffing combination	2005	2006	2007	2008
MA only	31.2%	34.8%	37.3%	35.1%
MA/RN	32.5%	30.5%	30.5%	32.2%
MA/LVN	13.3%	12.3%	12.4%	12.6%
MA/RN/ LVN	23.0%	22.5%	19.7%	20.2%

Source: Office of Statewide Health Planning & Development

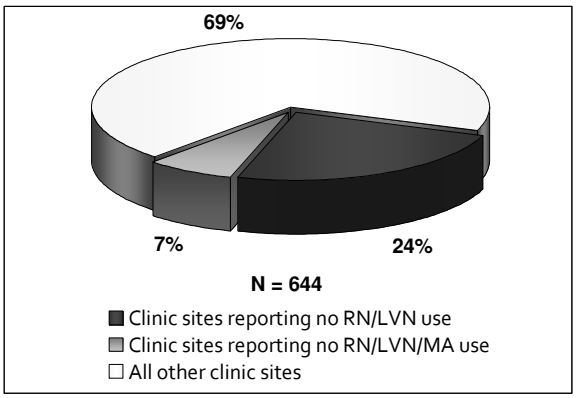
Table 4 data show that only using MA staff is becoming increasingly common among clinic sites reporting the use of MAs. By 2008, this pattern was reported by more than one-third of clinic sites that reported any MA use. These data also show that, in general, the use of MAs in combination with RNs or LVNs has been comparatively stable. This demonstrates the widespread use of MAs, but also suggests that MA-only staffing may become a more common pattern among community clinics.

Trended Analysis

The following analysis was conducted with a restricted sample of data. It describes only clinic sites that reported utilization data in each year during the period 2005-2008.

Figure 2 focuses on clinic sites that did not report the use of RNs, LVNs, or MAs.

Figure 2: Non-utilization of RNs, LVNs, and MAs in Community Clinics: 2005 – 2008



Source: Office of Statewide Health Planning & Development

Figure 2 reveals that nearly one-quarter of the clinic sites that reported utilization data in each year between 2005 and 2008 reported no use of either RNs or LVNs. It also shows that a smaller number of sites have never reported the use of RNs, LVNs, or MAs.

Data not included here show that the group of clinic sites reporting neither the use of RNs nor LVNs (in Figure 2 above) have increasingly reported the use of MAs (roughly 57% in 2005 and 67% in 2008). This finding underscores the possibility that use of MAs only is becoming a standard staffing pattern among community clinics. However, these data also show that some share of clinic sites are operating without the use of any RNs, LVNs, or MAs. These clinics may have characteristics that make them unique. Additional analysis using measures beyond staffing data would be required to make that determination.

Other analysis of data not included here indicate that the group of clinics that have never reported the use of RNs or LVNs, but are reporting the use of MAs, are not concentrated in any one segment of the community clinic system based on size (total patient encounters). Their distribution by clinic size very closely mirrors the general distribution for all clinics in the sample. This again indicates that the MA-only staffing

pattern may be becoming more common across the community clinic system.

Summary of Key Findings

The analyses presented in this brief suggest important differences in staffing patterns among California's community clinics that warrant further investigation.

Most community clinics in California utilize some combination of RN, LVN, and medical assistant staff. However, cross-sectional analysis of the period 2005-2008 shows the increasing utilization of MAs and generally no change in the overall use of either RNs or LVNs. LVNs are more frequently used by clinics located in rural areas. The number of clinics utilizing only RNs or only LVNs appears to be declining, whereas clinics' use of only MAs appears to be increasingly common.

Although the issue of labor substitution cannot be directly addressed with these data, they are suggestive of MAs being used in lieu of either RNs or LVNs. As noted, the set of clinics identified as having never reported the use of either RNs or LVNs between 2005 and 2008 reported the use of an MA with increasing frequency. The use of only MAs occurs across the community clinic system regardless of clinic size, though there may be differences based on geography.

Factors that may explain the findings presented in this brief include California's recent experience with a shortage of RNs, wage differentials based on work setting and location, and a growing supply of medical assistants throughout the state. Further research that explores these and other elements such as FTE staffing levels including primary care providers will give us a better picture of California's community clinic workforce and the dynamics that are shaping it.

Notes

[1] Specific categories of clinical provider staff identified in these data include: Physician, Physician Assistant, Nurse Practitioner, Nurse Midwife, Dentist, Psychiatrist, Clinical Psychologist, Licensed Clinical Social Worker, and other Medi-Cal billable providers not already identified.

[2] Specific categories of clinical support staff identified in these data include: Medical Assistant, Licensed Vocational Nurse, Registered Nurse, Patient Educator, Marriage & Family Therapist, Substance Abuse Counselor, Registered Dental Hygienist, both Registered and Unregistered Dental Assistant, and "other" clinical support staff not already identified.

[3] Source of data is the Office of Statewide Health Planning and Development, State Utilization Data File for Primary Care Clinics, 2005-2007. These data files are derived from the Automated Licensing Information & Report Tracking System (ALIRTS)-based *Annual Utilization Report of Primary Care Clinics,* filed annually by California's licensed community clinics.

[4] We geo-coded the address of each clinic using the Rural Health Grants Eligibility Advisor tool (a searchable database made available by the Health Resources and Services Administration) to determine whether the clinic was eligible for federal, rural health grants. If the clinic was grant-eligible, we identified it as being located in a rural setting. For more information see: http://datawarehouse.hrsa.gov/RuralAdvisor/ruralhealthadvisor.aspx?ruralByAddr=1

[5] The threshold was 70% of services related to either oral or mental health. This represents roughly 7% of the total number of clinic sites reporting utilization data in any year.

[6] For example, only 24 CMS-designated Rural Health Centers are identified in the 2007 OSHPD data. According to the Centers for Medicare & Medicaid Services, as of December, 2009, there were 263 Rural Health Centers in California.

[7] For a full listing of the types of clinics not licensed by the state, see California Health & Safety Code, Division 2, Chapter 1, Article 1, Section 1206.

[8] SB 1260, which was chaptered into law in September 2008, takes note of the fact that no agency in the Department of Public Health is currently able produce a list of hospital-based clinics in California because there is no requirement to identify them. This new law adds to section 1253.5 of California's Health & Safety Code, relating to health facilities, and will require "upon issuance or renewal of a general acute care, acute psychiatric, or special hospital license" that outpatient sites and services are identified and that by July 1, 2010 this information be made publicly available.

[9] Rural clinic sites account for approximately 18% of total number of clinics in each year. (Total number of clinic sites is given in Table 1.)

Acknowledgements

This report is a publication of the Health Workforce Tracking Collaborative (HWTC), which is administered at the Center for the Health Professions at the University of California, San Francisco.

HWTC is supported in part by a grant from the California Endowment.

HWTC is supported in part by a grant from the California HealthCare Foundation, based in Oakland, California.

HWTC is partially funded by a grant from The California Wellness Foundation (TCWF). Created in 1992 as an independent, private foundation, TCWF's mission is to improve the health of the people of California by making grants for health promotion, wellness education, and disease prevention.

The mission of the Center for the Health Professions is to transform health care through workforce research and leadership development.

University of California, San Francisco
3333 California Street, Suite 410
San Francisco, CA 94118

http://futurehealth.ucsf.edu