Title:

Increasing Reproductive Health Services through Family PACT Participation among California Community College Student Health Centers

Abstract

Objective: Community college students engage in more risky sexual behavior compared to their four-year counterparts, yet have access to fewer reproductive health services. The study's purpose was to examine whether California Community College student health centers' participation in Family PACT, a state publicly-funded family planning program, increased reproductive health services to community colleges students. **Participants**: California community college student health centers. **Methods:** Bivariate analyses of student health centers with and without Family PACT participation and qualitative analysis of five participating campuses. **Results:** Among the 60 colleges in the study, 25 student health centers participated in the Family PACT program. Family PACT campuses reported greater provision of sexual and reproductive health services and higher levels of staffing and revenue. **Conclusions:** Key benefits of Family PACT participation among community colleges include expansion of sexual and reproductive health services to an underserved population and increased student health centers' financial sustainability.

Keywords:
College health
Community college
Sexual health services
Publicly-funded
Family PACT

INTRODUCTION

Young adults must have access to a wide range of sexual and reproductive health services to be in full control of their reproductive lives and optimize health. A strong body of literature demonstrates the social and economic benefits of access to reliable contraceptives, such as the ability to follow through with educational goals.[1] Nationally, preventive care benefits, including contraception and sexually transmitted infection (STI) screening, are part of the ten essential health benefits that all health plans are required to offer under the Affordable Care Act.[2] Increasing the proportion of sexually active individuals, aged 15 to 44 years old, who receive reproductive health services, is also a Healthy People 2020 objective.[3]

Most college students are experiencing what Arnett termed "emerging adulthood," a developmental period from ages 18-25, during which young people undergo an exploration and formation of identity, friendships, relationships, and career choices.[4] Research has shown this period to be a time when young adults explore intimacy and sexual experiences.[5] By age 25, 93% of young people in the United States have had sexual intercourse.[6] Young people aged 15-24 account for half of the 20 million new sexually transmitted infection cases in the U.S. annually, according to the Centers for Disease Control.[7] The emerging adulthood period is therefore an opportune time for comprehensive sexual and reproductive health service provision.

Reproductive and Sexual Health Status of Community College Students

While there is an abundance of literature that explores sexual health attitudes, knowledge, and behaviors of college students, most of the research focuses on four-year college students. Community college students are underserved and understudied in research on student health, with a number of studies imploring that the direction of future research be focused on healthcare availability and accessibility to this population.[8]

A limited number of studies that do center on community college students have indicated that this population engages in more risky sexual behavior compared to their four-year counterparts, yet, has access to fewer sexual health resources.[7,9,10] A consortium of ten California Community Colleges that participated in the 2016 National College Health Assessment revealed that only 46.1% of students reported using any method of contraception (by them or their partners) the last time they had vaginal intercourse, and 17.6% of sexually active students reported using emergency contraception within the last 12 months.[11] A 2018 analysis on the state of sexual health services at U.S. colleges and universities found that, for community colleges with student health centers, 77.9% offered STI screening, while 46.6% offered contraceptive services, but noted that they may also require additional support for providing sexual health care, particularly from local agencies.[12]

Community colleges need to expand the provision of more comprehensive reproductive and sexual health services, which may support academic success. The Institute for Women's Policy Research, a leading think tank on public policy analysis, issued a briefing paper in 2020 laying out the evidence between reproductive access and educational outcomes, including the recommendation that college campuses and states partner to increase the range of affordable and reliable birth control options available to students on campus.[13] Studies have shown that community college students are motivated to seek higher education and are interested in preventing pregnancies, yet, have limited awareness of pregnancy risk and prevention methods such as effective contraception.[14] A 2013 study examining who should assume responsibility for two and four-year college students' sexual health revealed that student participants believed it is the college's responsibility to provide resources, but the responsibility of students to access such resources.[15] The provision of reproductive health care is considered central to a college health

program, as outlined in the American College Health Association's Framework for a Comprehensive College Health Program.[16]

California Family PACT Program

California's Family PACT (Planning, Access, Care, and Treatment) is the state's innovative approach to providing comprehensive family planning services to low income individuals, defined as under 200% federal poverty level.[17] The program serves 1.1 million residents of childbearing age through its network of more than 2,220 public and private providers. Although the intention of the Family PACT program is to provide family planning needs to individuals who have no other source of regular health care, there are a number of conditions that make students eligible, such as low income and the need for confidentiality. One systematic review reaffirmed the idea that young adults may be more open to seeking and receiving family planning services when confidentiality is preserved.[18]

Family PACT is a programmatically strategic and financially smart program for college health centers to enroll in for two primary reasons: Program enrollment will expand the range of sexual and reproductive health services to its student population, and participation will generate revenue through this reimbursement mechanism to support financial sustainability efforts of student health centers that already operate on a limited budget. In fiscal year 2015, the average statewide reimbursement per Family PACT client was $292, an amount when applied to a large cohort of students who are likely to access reproductive health services on campus, could yield significant supplemental income to colleges.

Community Colleges Operate on a Limited Budget for their Health Services

California Education Code 76355 authorizes the governing boards of each community college district to charge a health fee to support health supervision and services; the current

maximum allowable amount is set at $21 per term.[19] Nineteen dollars, per semester, was the average health fee charged in the 2018-19 academic year, yielding an average annual health fee of $38 per year, according to the latest survey of community college health programs in the state. Thirty-eight dollars per year is a fraction of the health fee at the two state public university systems: $273 is the California State University system average annual fee, and $2633 is the average annual fee across the University of California system. Community college health centers are in need of expanded revenue sources if they are to carry out a student health program that "must be sufficiently broad to meet health care needs of the general student body," as outlined in the appropriate use of the health supervision and services fee regulations.[19] Community college health centers are therefore ideal entities to participate in the state-funded family planning program.

About the California Community College System

The California Community College (CCC) is the largest system of higher education in the nation, serving approximately 2.1 million students across its 114 campuses plus one online college. Approximately one in every four community college students in the nation attend a CCC campus. The CCC system prides itself as being at the forefront of supporting social and economic mobility. The CCC system serves a student population of high need: more than 40% are the first generation in their families to attend college, while over half are economically disadvantaged.[20] Of the 115 campuses in the CCC system, 92 colleges, or 80%, have student health centers. This system of health care services, serving more than 1.6 million students, is in a unique position to promote healthy behaviors and encourage the uptake of preventative health care, such as sexual and reproductive health services.

Purpose of the Study

The purpose of the study is three-fold: [1] to examine student health centers in the California Community College system that participate in the state publicly-funded family planning program and compare school characteristics with nonparticipating campuses; [2] to examine reproductive health services characteristics and capacity between participating and non-participating campuses; [3] to understand the experiences of student health centers with a Family PACT program through a selection of case studies.

METHODS

Data Sources

This study used survey data from community colleges and qualitative data from selected colleges with Family PACT programs. Survey data were collected by the Health Services Association of California Community Colleges (HSACCC) with the intention of gathering annual benchmark data of community college student health centers. Since 2008, HSACCC has invited all member campuses with a student health center to complete an on-line survey annually to capture the prior academic year's student health services, staffing, policy compliance, revenue and funding, and service outcomes. Permission for using the data to conduct the research was granted by HSACCC. Consent from health center directors was implied by their participation in the survey. We pooled two years of HSACCC data from 2016-17 (n=51; response rate=55%) and 2018-19 (n=39; response rate=42%) surveys, using data from the most recent year if schools had both years of data. The analytic sample included 60 schools representing 65% of all community college student health centers. HSACCC data were merged with school-level and community-level characteristics. School characteristics are derived from California Community Colleges Chancellor's Office (CCCCO) Management Information Systems Data Mart and the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS).[21,22]

All community colleges submit data on school and student characteristics to CCCCO Data Mart and IPEDS. We merged each community college's school characteristics for the corresponding academic year. Community characteristics are from the American Community Survey (ACS) linked to the city in which the community college is located and matched to the corresponding year.[23] This study received approval from Public Health Institute's Institutional Review Board (#I20-018).

Quantitative Data Measures

Dependent variable: The key outcome measure is a community college student health center's enrollment in a Family PACT program reported from the HSACCC survey. Responses included *not enrolled, Family PACT offered by outside agency, Family PACT offered onsite with contracted billing provider, and Family PACT offered onsite with own billing*. The option *Family PACT offered by outside agency* denotes services rendered on campus. We dichotomized the measure into being enrolled in Family PACT (the latter three options) or not enrolled.

Independent variables: To describe characteristics and capacity of the student health center from the HSACCC survey, we included average number of full-time staffing, total number of students served, revenue and total budget, and types and total number of reproductive health services offered at the student health center. To account for school differences, we examined community college characteristics from Data Mart and IPEDS including total enrollment, student demographics (i.e., age, gender, race/ethnicity), and educational outcomes (i.e., retention/success rate, transfer and graduation rate).[21,22] Finally, we incorporated community-level characteristics from the ACS to examine potential differences by geography (rural-town, suburb, or urban), community socio-demographics (i.e., population density as

number of people per square mile, percentages of youth ages 18-24, minority composition, median household income, percent poverty, and percent with a college degree).[23]

Quantitative Data Analysis

Using Stata v.16,[24] we conducted bivariate analyses to examine the dependent variable of student health centers with and without a Family PACT program. First, we analyzed whether there were school-level or community-level differences. Then we examined whether student health centers with a Family PACT program were more likely to offer more reproductive health services and had greater capacity as measured via staffing, revenue/budget and number of students served. As a binary outcome, we used Pearson's chi-square tests for categorical independent variables and t-tests for continuous independent variables to test for statistical differences.

In sensitivity analyses using logistic regression models to predict having a Family PACT program, we included survey year to each of the bivariate models to account for potential differences in completing the HSACCC survey in 2016-17 versus 2018-19. No significant differences were found and we present the bivariate percentages and means for easier interpretation. Given the low response rates of HSACCC survey and the potential sample biases of colleges who did not participate in HSACCC survey, we compared colleges who completed the survey with colleges who did not complete the survey by their school-level and community-level characteristics.

Qualitative Data

We supplemented the quantitative findings with qualitative data to better understand the experiences of student health centers with a Family PACT program. We utilized a case study approach made up of semi-structured oral interviews with five student health center directors.

Schools were purposively selected by type of Family PACT program (with contracted outside agency or internally) and region in California (Northern vs. Southern) based on HSACCC survey data and membership contacts. Directors from the student health center of the selected schools were invited to participate in one-on-one telephone interviews. The authors drafted an interview protocol that included questions about history and decision-making to enroll in the Family PACT program, experiences related to program implementation and evaluation, and benefits, challenges and key recommendations from having a Family PACT program. The team followed a semi-structured interview protocol, and took detailed notes. The first author completed three interviews, and second and fourth authors each completed one interview, for a total of five interview case studies. Each interview lasted approximately one hour. After reviewing all five interview notes, the first and second authors met to discuss and identified key themes based on (1) factors in decision-making process, (2) benefits and challenges from program implementation, and (3) recommendations. Thematic analysis was used to examine how the five schools were similar and different based on these themes.[25] A cross-case comparison joint display is used to compare and contrast the school-level quantitative data with qualitative interview data across the five studies.[26] This joint display allowed for a more comprehensive analysis to gain a better understanding of Family PACT programs in the case studies.

RESULTS

Demographic Characteristics of CCC Student Health Centers

Among the 115 California community colleges, a total of 92 schools have a student health center. Given the varying response rates to HSACCC survey, demographic characteristics of schools in the sample (n=60) versus those not in the sample (n=32) are shown in Table 1. The two groups were similar in terms of population size, gender composition, academic quality, and

community characteristics such as population density and rural versus urban setting. Academic quality indicators included retention and success rates for degree-applicable courses (86.4 and 71.4%, respectively), as well as the graduation rate (29.6%) and transfer rate (10.8%). Retention rate signifies the rate at which students completed courses and did not withdraw from them, while the success rate refers to the rate at which students completed the course with an A, B, C or Pass grade.[27]

Between schools in the sample and those not in the sample, slight differences were noted with regard to race/ethnicity, with schools in the sample having a smaller percentage of Black students (5.1% vs. 8.0%) and higher percentage of white students (29.8% vs. 22.2%). Schools in the sample had a slightly greater percentage of students under age 25 (61.4% vs. 57.7%) while both groups had a comparable percentage of reproductive-aged students, with 93.1% of students being under the age of 50.[27] Finally, schools in the sample charged on average a higher student health fee ($19.38 vs. $17.00).

Comparison of Schools with and without Family PACT Participation

For the 60 schools with HSACCC data, Table 2 illustrates demographic characteristics of the 25 schools that participated in the Family PACT program versus the 35 schools that did not participate in Family PACT as of 2019. Of note, Family PACT participation encompassed all schools who provided Family PACT services on site, regardless of whether the services were provided by an outside agency (n=5; 20.0%) or whether billing was contracted externally (n=17; 68.0%) or billing conducted internally (n=3; 12.0%). The two groups had no statistically significant differences with regard to student population size, racial/ethnic composition, academic quality, and community characteristics. Schools that participated in Family PACT had a marginally lower percentage of female students than non-participating schools (53.4% vs.

55.6%) as well as a slightly lower percentage of reproductive-aged students; for schools participating in Family PACT, 58.9% and 91.3% of students were under age 25 and 50, respectively, versus 63.3% and 94.4% for non-Family PACT schools.

Comparison of Student Health Centers with and without Family PACT Participation

Table 3 compares characteristics of the 25 California Community College student health centers with Family PACT participation to the 35 programs that do not offer Family PACT services. There was no significant difference between the two groups in the number of students who receive health care services. Student health centers enrolled in Family PACT had on average a greater number of permanent staff (4.83 vs. 2.60). Schools participating in Family PACT also had a higher average revenue from student health fees ($617,627 vs. $547,309). Schools with Family PACT also reported additional revenue from Family PACT reimbursement averaging $16,648, compared to $0 for schools without Family PACT participation.

A higher percentage of health centers offering Family PACT offered emergency contraception (96% vs. 56.3%) as well as hormonal birth control methods (100% vs. 62.5%) compared to programs not enrolled in Family PACT. Compared to programs without Family PACT, a greater percentage of Family PACT-enrolled programs offered STI testing (100% vs. 59.4%), HIV testing (87.5% vs. 62.5%) and long-acting reversible contraception (52.2% vs. 22.6%). There was no difference between schools with and without Family PACT in the provision of condoms or pregnancy testing.

To delve further into Family PACT participation not reported in the HSACCC survey, Table 4 highlights themes from key informant interviews at select community college campuses. The five campuses, all of which were participating in Family PACT at the time of the interviews, were selected to provide a snapshot of varying geographic locations and community settings

within California. Once a college enrolls in Family PACT, the institution has the ability to be reimbursed for services rendered for every year thereafter. The year in which a campus first enrolled in Family PACT varied over a 9-year span from 2008-2015, and all campuses cited good administrative support for Family PACT enrollment. All campuses described revenue generation as a key motivating factor for Family PACT enrollment and generated between $5000 and $60,000 in the preceding year through Family PACT. All selected campuses reported the presence of nearby community-based family planning services but cited the ability to provide reproductive health services to students on campus as a benefit of Family PACT participation. Challenges of Family PACT participation included staffing and billing concerns, normalizing provision of sexual health services on campus, challenges in up-front cost and provision of long-acting reversible contraception (LARC), and difficulties publicizing the services to students. Outreach strategies included signage, social media, classroom presentations, and partnerships with student government or student-led publications. When discussing recommendations for future campuses looking to participate in Family PACT, the participating campuses recommended use of a third-party biller to decrease administrative burden and highlighted the mutual success of Family PACT for both students and the campus as a whole.

DISCUSSION

Our findings show that schools participating in Family PACT are more likely to offer sexual and reproductive health services to community college students. This supports the necessity for other college health centers to participate in Family PACT to better meet students' needs and maximize revenue generation. College health centers have an obligation to provide the standard of care. The American College Health Association outlines best practices for sexual health promotion and clinical care, which include being proactive about addressing sexual health

with patients by taking a routine sexual history that is inclusive and comprehensive, providing treatment and making referrals as appropriate.[28]

School and community characteristics did not appear to be key factors in Family PACT program enrollment. There were no school- and community-level characteristic differences; yet, we do not know why some campuses enroll in Family PACT and some do not. Information gathered in the case studies suggests that strong, universal administrative support was a common element for Family PACT enrollment process. Additional information is needed to better understand incentives and barriers to Family PACT participation. Nonetheless, there may be an unrealized programmatic, academic, and financial potential for Family PACT participation among schools who currently do not participate.

Comparison of Student Health Centers with and without Family PACT Participation

While staffing capacity is higher among Family PACT schools compared to non-participating schools, the number of unique patient encounters was comparable. We cannot explain the similar productivity level, though it may be the case that staff time may have been dedicated to supporting enrollment and billing practices of the Family PACT program, as staff were not identified as clinical versus non-clinical. Enrollment in the Family PACT program may potentially generate a revenue stream that would support program operations. California community colleges enrolled in the Family PACT program offer more comprehensive reproductive health care services that focus on prevention, which is aligned with and a central component of the American College Health Association's Framework for a Comprehensive College Health Program and in alignment with the intent of CA Education Code Title 5 on the proper use of funds of provision of health services. Access to such services has been shown to

increase retention and completion of goals in academic settings, specifically among young women of lower socioeconomic status.[29]

Community college students may be unlikely to seek reproductive health care outside of the campus-based student health setting for a multitude of reasons including access, confidentiality issues and possibly insufficient insurance coverage.[8,12,30] Our case studies reiterated the benefits regarding onsite provision of reproductive health services for the student population, despite the presence of nearby community-based family planning services. The Carnegie Foundation defines college health as "developmentally appropriate, educationally effective, medically expert, accessible, and convenient."[31] Provision of a comprehensive range of sexual and reproductive health services supports college campuses in the realization of this vision.

IMPLICATIONS FOR PRACTICE

Participation in California's state-funded Family PACT program could benefit community colleges. Family PACT can potentially strengthen health service delivery at community college health centers, ensuring students receive a diverse array of reproductive health services. California community college student health centers that are not enrolled in the Family PACT should explore the benefits of participation and consider enrollment. Currently, fewer than half of colleges with student health centers are enrolled, leaving the majority of campuses with potential to expand their provision of more comprehensive sexual and reproductive health services.

With over 90% of the community college student population being of reproductive age, expansion of sexual and reproductive health services would help community colleges deliver relevant and needed care. For many students, sexual debut occurs during emerging adulthood

and college health centers can help set the trajectory for young people to engage in positive, healthy behaviors.[6] Community college students who are introduced to or use the Family PACT program can continue accessing such care at community health centers or other Family PACT provider locations once they matriculate.

Through a structured program such as Family PACT, college health centers would be able to provide preventive care in line with national performance measures such as cervical cancer screening and STI screening; these are services covered under the Family PACT reimbursement structure. Family PACT participation has been shown to be associated with increased long-acting reversible contraception provision.[32] For many students, having access to highly-effective contraceptive methods can support retention and academic success.[13] Currently, only about one in five (22.6%) of non-participating campuses offer LARCs, compared to slightly over half (52.2%) of those participating in Family PACT. Enrollment in Family PACT could help provide an infrastructure for healthcare providers to fully realize their scope of practice and provide a greater spectrum of services. Furthermore, participation in Family PACT might strengthen ties with other healthcare providers in the community and promote continuity of care; for instance, patients with positive pregnancy tests might be referred to local healthcare providers that may offer abortion services or prenatal care as indicated.

Enrollment in the Family PACT program will also yield additional financial resources through reimbursements of services rendered. The average Family PACT reimbursement for participating colleges during the last academic year was $16,648; this would result in a 3% average increase in the budget revenue for non-participating campuses—funds that are even more needed as healthcare costs continue to rise while the student health fee per term remains stagnant. One school in our case study reported generating $60,000 in Family PACT

reimbursement during the last school year, and brought in $325,000 in student health fee revenues, which amounts to an additional 18% of what was collected from health fees—a substantial amount. Community colleges students experience varying degrees of socioeconomic hardship and are ideal candidates for Family PACT eligibility. Expanding access would allow campuses to support their students' health and academic outcomes while generating a revenue stream for future sustainability efforts.

Recommendations

For the twenty-five campuses that are currently participating in Family PACT, there is opportunity for HSACCC to organize a learning collaborative to engage member colleges in collective problem-solving, share promising strategies, and optimize billing practices. Such collaboration could also provide assistance to other campuses interested in enrolling in Family PACT. Additionally, HSACCC should increase engagement of its membership to complete annual surveys for higher quality data. Future studies should also examine challenges associated with Family PACT participation found in our case studies, such as staffing capacity, upfront costs with providing LARCs, and program outreach strategies. As part of a future study, community college student health centers may consider assessing student awareness of services and advertising methods to help increase Family PACT enrollment. Family PACT has established clinical care program standards to ensure high quality of care; a follow up study can focus on whether participation in such a program would also improve the quality of care provided by community colleges.

Limitations and Strengths

Although this study contributes to the dearth of literature on community college reproductive and sexual health services, there are several limitations. The dataset is not

reflective of all community college student health centers in the state, and therefore, results are not generalizable. HSACCC's annual survey included a limited number of items related to participation in Family PACT, which does not allow for deeper analysis of program participation. For example, the HSACCC annual survey did not include questions related to the measurement of student health center capacity pre- and post-Family PACT adoption and its impact on revenue generation. Further, quantitative findings on health services characteristics were self-reported. Additionally, the study did not include interviews with campuses that did not have a Family PACT program; this is an area for consideration in future studies. The validity and reliability of the HSACCC annual survey instrument have not been established; there is an opportunity to strengthen and improve survey instrument to optimize the quality of data collected from community colleges.

Despite these limitations, this study had some notable strengths. This is the first study, to our knowledge, to examine participation of college health centers in publicly-funded family planning programs and understand reproductive health services characteristics and capacity. Research has shown that during economic downturns such as the one we are currently experiencing as a result of the global COVID-19 pandemic, the need for publicly-funded family planning services rises. Because of this, combined with an increase in enrollment in community colleges, there will be greater need for family planning services. This is an exploratory study that can lay the groundwork for a deeper analysis on the provision of sexual and reproductive health services to an underserved population and ways in which colleges can provide such services in a financially sustainable manner.

Conclusion

Understanding the landscape on sexual and reproductive healthcare availability and accessibility among community colleges in the largest institution of higher learning in the nation is an important step in maximizing opportunities that can help set the trajectory for young adults to engage in positive, healthy behaviors. Moreover, community college health centers have a collective responsibility to further the aims of national goals such as Healthy People 2020 and advance the field of college health.

Table 1. Sample Characteristics among California Community Colleges with Student Health Centers

	Schools in Sample	Schools not in Sample	p-value	Total
	n or %	n or %		n or %
Total n	60	32		92
Student Composition				
Student Population Size	24,186	19,447		22,537
(SD)	(12,275)	(11,395)		(12,127)
% Female	53.9	55.6		54.5
% Latino	42.6	46.6		43.9
% White	29.8	22.2	0.018	27.1
% Black	5.1	8.0	0.029	6.1
% American Indian /Alaskan Native	0.5	0.3		0.4
% Asian Pacific Islander	14.2	15.0		14.5
% <25 years old	61.4	57.7	0.043	60.1
% <50 years old	93.2	92.9		93.1
School Resources				
Student Health Fee ($), Fall 2018	19.38	17.00	<0.001	18.55
Academic Quality				
Retention Rate: Degree Applicable (%)	86.6	86.1		86.4
Success Rate: Degree Applicable (%)	71.6	71.0		71.4
Graduation Rate (%)	30.9	27.3		29.6
Transfer-out Rate (%)	10.9	10.6		10.8
Community Characteristics				
Rural-Town	6.7	3.1		5.4
Suburb	43.3	50.0		45.7
Urban	50.0	46.9		48.9
Population Density*	4,885	6,120		5,315
%18-24 year olds	10.1	10.3		10.2
% Non-White	37.1	39.6		38.0
Median Household Income ($)	74,933	78,105		76,037
% Poverty	14.2	15.1		14.5
% College Degree	35.9	36.9		36.2

Note: Only statistically significant p-values at a level less than 0.05 are shown.
*Population density is defined as number of people per square mile.

Table 2. Schools with Family PACT Compared to Schools without Family PACT among California Community Colleges with Student Health Centers

	Family PACT Program	No Family PACT Program	p-value	Total
	n or %	n or %		n or %
Total n	25 41.7%	35 58.3%		60
Student Composition				
Student Population Size (n/SD)	25,682 (12,171)	22,140 (11,374)		23,616 (11,743)
% Female	53.4	55.6	0.048	54.7
% Latino	45.4	41.1		42.9
% White	30.0	29.2		29.5
% Black	3.9	6.1		5.2
% American Indian /Alaskan Native	0.5	0.4		0.5
% Asian Pacific Islander	11.9	15.9		14.3
% <25 years old	58.9	63.3	0.036	61.5
% <50 years old	91.3	94.4	0.009	93.1
School Resources				
Student Health Fee ($), Fall 2018	18.84	18.97		18.92
Academic Quality				
Retention Rate: Degree Applicable (%)	87.4	86.7		87.0
Success Rate: Degree Applicable (%)	72.5	71.2		71.7
Graduation Rate (%)	32.3	29.9		30.9
Transfer-out Rate (%)	10.8	10.9		10.9
Community Characteristics				
Rural-Town	4.0	8.6		6.7
Suburb	32.0	51.4		43.3
Urban	64.0	40.0		50.0
Population Density	5,392	4,398		4,813
%18-24 year olds	11.1	9.3		10.0
% Non-white	31.9	40.4		36.9
Median Household Income ($)	79,053	73,611		75,878
% Poverty	13.2	14.7		14.1
% College Degree	37.7	34.7		35.9

Note: Only statistically significant p-values at a level less than 0.05 are shown.

Table 3. Student Health Center Characteristics among California Community Colleges

	Family PACT Program	No Family PACT Program	P-value	Total
	n or % *(min, max)*	n or % *(min, max)*		n or % *(min, max)*
Total n	25	35		60
Student Health Center Characteristics				
Average Full-Time Equivalent Permanent Staff	4.83 *(2.0, 11.5)*	2.60 *(0.0, 10.0)*	0.002	3.61 *(0.0, 11.5)*
Total Unduplicated Students Served	2,354 *(0, 12,000)*	2,262 *(25, 10,000)*		2,308 *(0, 12,000)*
Total Encounters Per Student Served	2.1 *(0.0, 5.0)*	3.0 *(1.0, 13.0)*		2.5 *(0.0, 13.0)*
Revenue and Budget				
Revenue from Student Health Fee ($)	617,627 *(99, 1,600,000)*	547,309 *(100, 1,298,467)*		580,400 *(99, 1,600,000)*
Revenue from Family PACT ($)	16,648 *(0, 60,000)*	0 *(0, 0)*	<0.001	8,324 *(0, 60,000)*
Total Budget Expenditures ($)	697,917 *(250,000, 1,200,000)*	553,030 *(150,000, 1,200,000)*		614,035 *(150,000, 1,200,000)*
Reproductive Health Services (%)				
Condom	100.0	97.1		98.3
Pregnancy Testing	100.0	91.2		94.9
Emergency Contraception	96.0	56.3	<0.001	73.7
Birth Control	100.0	62.5	0.001	78.6
STI Diagnosis/Testing	100.0	59.4	<0.001	77.2
HIV Testing	87.5	62.5	0.037	73.2
Long-Acting Reversible Contraception	52.2	22.6	0.024	35.2
Average number of services provided	6.3 *(4.0, 7.0)*	4.4 *(0.0, 7.0)*	<0.001	5.2 *(0.0, 7.0)*

Note: Only statistically significant p-values at a level less than 0.05 are shown.

Table 4: Family PACT Participation among Select California Community College Campuses

	Campus A	Campus B	Campus C	Campus D	Campus E
Geographic	Southern California	Bay Area	Bay Area	Southern California	Southern California
Campus setting	Suburban	Suburban	Suburban	Urban	Suburban
Student enrollment	6,499	5,483	8,670	19,997	16,405
Permanente FTE	6	2	3.25	3.5	3.5
Years of enrollment	2012 - Present	2015 - Present	2008 - Present	2017 - Present	2012 - Present
Organization partnership	None	None	Community nonprofit hospital	None	None
Community-based family planning services	Neighborhood public health clinics	Planned Parenthood and community clinics nearby	Planned Parenthood and community clinics	Planned Parenthood in the community	Planned Parenthood, Family Planning Associates
Reasons for enrollment	Potential for revenue	Potential for revenue; ability to dispense medication from clinic	potential for revenue, ability to provide comprehensive services in a timely manner	Encouragement from CCC colleague; need for additional revenue	Provide needed reproductive health services, realize revenue stream
College administration support	Good; participation needed to be district-wide	Good	Good	Good	Good
Program benefits	Financial revenue; convenient services for students	Participation trigged clinic to transition to EMR system	Revenue, builds rapport with the student body, offers more options for family plannng for student	Family planning services for students	Confidential/free services for students; financial revenue
Program challenges	Introduction of LARCs to college administrators on liability	Student awareness; normalizing STD screening	Billing is challenging, campus climate not always open to sexual education	Placement of reimbursement funds in college account; lack of capacity to provide LARCs onsite	Marketing/publicity; having sufficient staffing to provide services
Outreach strategies	Poster displays; partnership with student government	Signage; social media; classroom presentations	social media, signage, classroom presentations	Use of MPH students to conduct classroom presentations	Classroom presentations; posted flyers; student-led newsletter
Revenue generated last year	$15,000	$5,000	$60,000	$50,000	$60,000
Future recommendations	Benefits outweight barriers; provide students a full range of services	Partner with third-party biller to reduce burden	Overall elevates the total student health program and provides relevant services to studetnts	It's a win-win for the college and students	Partner with third-party biller to reduce burden; engage staff in understanding Family PACT

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