Graduate Student Council Quality of Life Survey (2020)

Healthcare Report

Contents

Introduction ........................................................................................................................................ 2
Key Findings ...................................................................................................................................... 3
Summary of Recommendations ........................................................................................................... 4
Overview of the Caltech Student Health Insurance Plan ................................................................... 7
Analysis of GSC Quality of Life Survey Data .................................................................................. 9

Healthcare Costs

Access to Healthcare

Caltech Student Wellness Center

Mental Health

Use of the Graduate Studies Office Student Emergency Fund

Dependent Healthcare

Trans Healthcare

Discomfort with the US Health Insurance System and Caltech Health Insurance

Healthcare Advocacy at Caltech ....................................................................................................... 32

Acknowledgements .......................................................................................................................... 35
Introduction

Without high quality, affordable, and accessible healthcare, graduate students can face irreparable harm, and simply cannot be full members of our Caltech community. Healthcare needs can come at any time and in many forms, making it vitally important that healthcare at Caltech is not merely targeted at an imagined ‘median’ student, but covers the full range of possible treatments—both physical and mental.

Graduate students are paid a stipend, designed to cover their cost-of-living expenses during their PhD work. Expensive or inaccessible health insurance leaves graduate students having to fill the shortfall themselves, effectively translating into a pay cut purely on the basis of medical need. This burden will fall harder on poorer students—who are much less likely to be able to fall back on savings or family resources—and groups such as people who are chronically ill, women, and non-binary people, who make more use of the healthcare system.

Given two subsequent years of cuts to graduate student health benefits, the Graduate Student Council asked a number of questions related to student healthcare in the 2020 Quality of Life Survey. The questions were meant to assess the cost, quality, and availability of healthcare for graduate students, with an eye towards determining how costs are distributed among different categories of graduate students. In the report below we, the Health Subcommittee of the Graduate Student Council, present our findings on the state of graduate student healthcare at Caltech and list specific recommendations for improving that care. We would like to thank Caltech’s Institutional Research Office and members of the GSC for their assistance in preparing and distributing this survey.

We begin first with some basic facts and relevant demographic data. We surveyed 580 out of 1080 returning graduate students (response rate: 52.8%). Of these, 456 survey respondents (78.6%) were enrolled in United HealthCare Student Resources (UHCSR), the insurer for Caltech graduate students since the 2014-15 academic year. Because the results of the survey generally do not change very much when restricted just to those on the UHCSR plan (see e.g. Figure 4), data presented here are for all graduate students, regardless of health plan, unless otherwise explicitly stated. Health insurance related questions were asked for the September 2019 - September 2020 plan year.

Chronically ill and disabled students, in other words those with recurring healthcare needs, comprise a significant fraction of the graduate student body. 37.6% of respondents reported experiencing a chronic health condition (defined as lasting three months or longer) during their time at Caltech, and 6.28% identified as disabled. Restricting the data to only female and nonbinary respondents, the proportion that has experienced a chronic illness rises to 44.1%.

The combined stressors of the COVID-19 pandemic and the cost increases for the Caltech student plan have exacerbated the difficulty of accessing healthcare, particularly for those who need it the most. In addition to presenting the data behind our conclusions, we also present statistics related to Emergency Fund use (sometimes proposed as a way to cover healthcare costs) as well as general comments and recommendations from transgender students speaking to the difficulties in accessing adequate care. We hope that this analysis definitively shows that healthcare at Caltech is an issue of equity, and that Caltech could greatly improve the material well-being of a significant fraction of its student body by providing quality healthcare at affordable cost.
Key Findings

**Over one quarter of respondents had large annual medical expenses.** While a majority of respondents (71.8%) had medical expenses amounting to less than $500, a significant number (28.2%) reported medical expenses over $500. Of these, 25 respondents (4.6%) reported extremely burdensome medical expenses of over $2500, which represents 7.1% of the pre-tax minimum stipend (or nearly an entire month’s stipend).

**Over one third of respondents avoided medical care because it was unaffordable.** 36.5% of respondents reported sometimes or often avoiding needed medical care due to the anticipated cost during the 2019-2020 plan year.

**For many respondents, needed medical care was not covered by their insurance plan.** Nearly a quarter (24.0%) of respondents stated that at some point during their time at Caltech, a needed medication or procedure was not covered by their health insurance.

**Women and non-binary students were disproportionately impacted by high healthcare costs and lack of access to care.**

- 34.8% of women and non-binary respondents spent over $500 on medical expenses.
- 42.7% of women and non-binary respondents sometimes or often avoided medical care due to cost.
- 32.0% of women and non-binary respondents needed medical care not covered by their insurance plan.

**Over a third (36.7%) of respondents reported having a chronic illness (defined as lasting longer than three months) during their time at Caltech.**

**Students with chronic illness were disproportionately impacted by high healthcare costs and lack of access to care.**

- 44.8% of chronically ill respondents spent over $500 on medical expenses.
- 44.6% of chronically ill respondents sometimes or often avoided care due to cost.
- 36.1% of chronically ill respondents needed medical care not covered by their health insurance plan.

**Respondents frequently accessed medical care off-campus.** A large majority (70.7%) of respondents reported using off-campus health services. The most commonly cited reason for going off-campus was that needed services were not offered on campus, followed by concerns about the quality of care.

**Mental health benefits were utilized by a large number of respondents.** In particular, 15.4% of respondents on the UHCSR insurance plan used the 25 mental health visits with no copay built into the plan.

Transgender students report a lack of access to trans healthcare services and great need for improvement in understanding the requirements of and providing care for transgender individuals.
Summary of Recommendations

**Design of student insurance plan**

- Select a student health plan with an out-of-pocket maximum no higher than $1500 for in-network care, and $5000 for out-of-network care.

- Select a student insurance plan with a deductible no higher than $250 for in-network care, and $500 for out-of-network care.

- Design an insurance plan with more flat copays rather than co-insurance for common types of care, including lab tests, imaging and physiotherapy.

- Select a health insurance plan that covers 52 mental health visits without a copay.

- Select an insurance plan that covers infertility and gamete preservation services.

- Select an insurance plan that covers comprehensive transgender healthcare, including gamete preservation, hair removal, voice training, facial gender confirmation surgery, and prescriptions for hormone replacement therapy (HRT). Explicitly list which procedures are covered under the plan.

- Select an insurance plan that includes in-network mental health providers who are able to work with transgender people, particularly providers who are certified by the World Professional Association for Transgender Health (WPATH).

- Take into account the rate of denials of prior authorization requests, and the student experience of having delayed care or inaccessible care due to prior authorization in selecting the insurer.

**Funding of student health costs**

- Cover 100% of the premium cost of health insurance for all graduate students, or automatically adjust the stipend each year in a way that completely offsets any increase in health insurance premiums.

- Cover the full premium for dependents OR at least increase the Dependent Healthcare Supplement such that it covers 80% of the premium cost for dependents.

- Set up a Health Fund separate from the Emergency Fund. All medical expenses incurred above $1500 per academic year would automatically be reimbursed to the student from the Health Fund. Special care should be taken to ensure that students’ privacy is not violated during the reimbursement process. In particular students should be encouraged to redact diagnostic and
procedure codes from any documentation before submitting it to the Health Fund. The documentation should be reviewed by someone who is not a dean or other faculty member who may have an academic relationship to the student.

- In the interim, make the following small changes to the implementation of the Emergency Fund.
  
  1. Issue clarification that large health costs incurred while treating chronic illnesses are covered by the Emergency Fund.
  
  2. Encourage applicants to redact diagnostic or procedure codes from documentation they submit as proof of payment during their Emergency Fund application.
  
  3. Have applications reviewed by someone who is not a graduate dean or other faculty member.
  
  4. Investigate alternative payment mechanisms that do not result in Emergency Fund payments getting taxed, or increase payments to take account of taxation.

**Student input and procedure**

- Before the Faculty’s Standing Health Committee discusses the student health insurance plan, inform the student body of proposed policy changes and bids from alternative insurance companies and open a comment period.

- Require that a majority of the Faculty’s Standing Health Committee vote to approve decisions about the student health insurance plan before it makes its recommendation.

- Submit the annual recommendation of the Faculty’s Standing Health Committee on the content of the next year’s student health insurance policy to the GSC Healthcare Subcommittee for approval by a vote before it is presented to the administration.

- Publicize the Faculty’s Standing Health Committee meeting minutes and recommendations relevant to graduate students among the graduate student body.

- Provide the Faculty’s Standing Health Committee with a cost study – conducted by the appropriate offices – of any health insurance plan changes to both Institute and graduate student finances before it makes a recommendation.

**On-campus resources**

- Student Wellness Services should explore the feasibility of having in-house diagnostic X-rays, which would entail appropriately trained staff and new equipment.
• Student Wellness Services should keep up-to-date lists of in-network specialists practicing in Pasadena and make these available on the website. It should also be made clear on the website that with the student insurance plan, students may self-refer to specialists without first seeing a primary care provider.

• Student Wellness Services should hire a medical director who understands transgender healthcare and who respects transgender people.

• Student Wellness Services should publicize its ability to provide hormones for those with existing prescriptions.

• One out of five graduate students reported that the mental health and counseling resources on campus are not sufficient. We recommend that Caltech hires additional staff at the Counseling Center to increase capacity and allow for longer-term care.

• Student Wellness Services should consider what additional services it could offer, and conduct further studies on what services are most commonly needed by Caltech students.

• Caltech should designate a staff member who can assist newly admitted graduate students with ensuring continuity of medical care prior to their move to Caltech. Their contact information should be included in the welcome packet for new students.

• Caltech should put on a health insurance workshop during graduate student orientation so that all students have a good knowledge of the healthcare system, and how they should go about getting the care they need, particularly in emergency situations.

• Give all incoming students an information packet including a glossary of terms and the specifics of how to get emergency care, including the likely costs and locations of in-network urgent care providers near campus.

Institute policy

• Caltech currently lacks any institution-wide policies that guarantee graduate students time off for mental health. We recommend that Caltech develops university-wide policies guaranteeing graduate students days off specifically for mental health in addition to the sick days.

Public policy

• We recommend that Caltech endorse California Assembly Bill 1400 (Guaranteed Healthcare for All) and use its lobbying resources to support it. The passage of this bill would remove the need for Caltech to provide health insurance to grad students in the long term.
Overview of the Caltech Student Health Insurance Plan

The Caltech student health insurance plan is a Preferred Provider Organization (PPO) purchased through United HealthCare Student Resources (UHCSR), in which there is a network of healthcare providers that provide services at a reduced rate (referred to as ‘in-network’). A student enrolled in the plan will accrue reduced costs when seeking care from in-network providers rather than providers that are out-of-network.

There are several types of costs associated with the plan:

- The **premium** is the flat annual cost of enrolling in the plan. For graduate students, Caltech covers 80% of this cost. For graduate students’ dependents, Caltech covers 0% of this cost.

- A **copayment**, or copay, is a flat fee one pays every time one visits a physician.

- The **deductible** is the out-of-pocket cost one pays in full before the insurer covers part of the cost of services.

- After one spends an amount equal to the deductible, the insurer covers a fraction of further costs called the **co-insurance** (80% for in-network providers, 60% for out-of-network providers for the UHCSR plan).

- One then continues to pay the complementary fraction of health costs until one reaches the **out-of-pocket maximum**, the amount after which the insurance company covers 100% of the cost.

Note that both the deductible and out-of-pocket maximum for in-network and out-of-network providers accrue separately. Figure 1 shows the cost dynamics for the 2020-21 plan (in-network only), and Figure 2 lists the plan parameters for the 2018-19, 2019-20, and 2020-21 insurance plans.

Figure 2 shows that the plan deductible and out-of-pocket maximum have both increased since 2018. Student advocacy has been crucial in preventing further cuts to the student health insurance plan. In fact, administrators proposed cutting the number of mental health visits without copayment from 25 to 12 for 2020-21, but vociferous student advocacy was crucial in maintaining the current level. Furthermore, student advocacy also prevented an increase in the physician copayment from $15 to $25. In order to effectively advocate not just against cuts but also proactively for a better health insurance plan, we must study the effects of cuts to student health benefits and look carefully at plan usage, costs, and access to care.
Figure 1. Simplified model (assuming co-insurance only with no copays) of medical costs to students as a function of costs billed by in-network providers for the 2019-20 plan year (black) and 2020-21 plan year (red).

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Figure 2. UHCSR student health insurance plan parameters over the last three academic years. Values in red indicate an increased cost to students compared to the previous year. The survey asked questions for the period AY 19-20 (highlighted), before several increases to the deductibles and out-of-pocket maximums were implemented. OoPM is an abbreviation of ‘out-of-pocket maximum.’
Analysis of GSC Quality of Life Survey Data

The following sections present detailed results from the 2020 Quality of Life Survey with recommendations based on our findings. For an overview of all recommendations categorized by type, see the Summary of Recommendations section at the beginning of this document (p. 4).

Healthcare Costs

In 2019-20, students on the Caltech student health insurance plan paid a $546 premium for medical and prescription insurance (not including dependents), a $128.68 premium for dental insurance (not including dependents), and an optional $31.20 premium for vision insurance (including dependents). While dental and vision insurance premiums have remained relatively stable over the past several years, the medical and prescription insurance premium has been increasing since 2016-17 (see Figure 3).

![Health insurance premium cost to grad students](chart.png)

Figure 3. Premium cost to grad students for medical and RX insurance since Academic Year 2014-15, the first year that the group plan was provided by UHCSR after switching from Aetna. Grad students typically pay around 20% of the full cost of the premium for their own insurance while Caltech pays the rest. Grad students must pay 100% of the premium cost for their dependents.

In addition to paying a premium for a health insurance plan, all Caltech grad students may have further out-of-pocket medical expenses that result from insurance cost-sharing (deductibles, copays, and co-insurance) and healthcare that is not covered by insurance. The distribution of these out-of-pocket medical costs is shown in Figure 4.

While it is encouraging that a majority of respondents reported annual out-of-pocket costs below $500, a significant minority (28.2%) of respondents reported over $500 of out-of-pocket costs, including 25 respondents who spent over $2500 on medical expenses. For reference, $2500 represents 7.1% of the pre-tax minimum stipend for the survey period.

Since the UHCSR plan for the survey year had an out-of-pocket maximum of $1500/$5000 for in-network/out-of-network care, the fact that some people on that plan spent over $2500 suggests that either...
some students have been going out-of-network for care, or have been accessing care that is not covered by our insurance plan at all.

Figure 4. Distribution of out-of-pocket health costs (not including insurance premiums) for plan year 2019-20.

These high out-of-pocket costs are borne disproportionately by two populations: students with chronic illness, and women and non-binary students. Cost share between students with and without chronic illness is shown in Figure 5, while cost share between women and non-binary respondents and male respondents is shown in Figure 6.

Students with chronic illness are underrepresented amongst those who paid less than $200 in medical costs over the year, but are overrepresented in every other cost group. In particular, 44.8% of students with chronic illness spent over $500 out-of-pocket, as compared to 28.2% of the general population. Of the 25 students with out-of-pocket costs above $2500, 20 had a chronic illness.

Women and non-binary students are underrepresented in each cost range below $500, and overrepresented in each cost range above $500. 34.8% of women and non-binary students spent over $500 in medical expenses, as compared to 28.2% of the general population. One possible reason for the increased costs accrued by women and non-binary students is that these students are more likely to report chronic illness than male students; 44.2% of women and non-binary respondents had chronic illness, while only 33.7% of men reported the same. Note that services such as “well-woman” visits, cervical cancer screenings, and contraceptive education and counseling are classified as preventative services and are covered at 100% co-insurance (no cost to the student) by the UHCSR plan for in-network providers.
Figure 5. Out-of-pocket spending for students with and without a chronic illness. Students with chronic illness are those who reported experiencing an illness (including mental illness) lasting at least three months during their time at Caltech. The horizontal line represents the proportion of survey respondents with chronic illness.

Figure 6. Cost share of out-of-pocket healthcare spending by gender. The horizontal line represents the proportion of survey respondents who were women or non-binary.
Those students on the UHCSR health insurance plan who hit their out-of-pocket maximum paid at least $1500 out-of-pocket in addition to the premium. Our survey found that 9.7% of respondents with UHCSR insurance (44 people), and 9.4% of all respondents (48) people hit their out-of-pocket maximum in the 2019-20 plan year. However, a larger fraction, 15.5%, of respondents with chronic illness hit their out-of-pocket maximum.

Comparing the distribution of out-of-pocket costs from this year’s survey to previous data collected by the GSC Quality of Life Survey (Figure 7), we can see that the distribution of out-of-pocket costs was relatively stable over time. In particular, the categories above $500 were similar each year. This is unsurprising because the out-of-pocket maximum remained unchanged between September 2016 and September 2020. There is some shifting from year-to-year between the $0-$200 and $200-$500 categories. This may be related to the increase in in-network deductible from $150 to $250 in September 2019. It will be important to look at this distribution of costs again for the 2020-21 plan year, as an increased out-of-pocket maximum may affect students with higher health expenses.

![Distribution of out-of-pocket medical costs over time](image)

*Figure 7. Distribution of out-of-pocket medical costs over the last four years. Note that for this year’s survey we asked about out-of-pocket costs for the period September 2019-20 which corresponds to the insurance plan year which begins on September 1st. In the previous surveys, the one-year time periods were not aligned with the insurance year.*
Recommendations: Healthcare Costs

- The most important way Caltech can, in the short term, ensure that a minority of students are not saddled with large medical costs is to select a student health plan with a low out-of-pocket maximum. Unfortunately, in AY 2020-21, after this survey period, the out-of-pocket max in UHCSR’s group plan actually increased by $500. We recommend the plan selected for AY 2021-22 have an out-of-pocket max no higher than $1500 for in-network care, and $5000 for out-of-network care, which were the parameters in the AY 2019-20 plan.

- To cover the small number of cases in which students are forced to go out-of-network for medical care or access care not covered by insurance, we recommend that Caltech set up a Health Fund separate from the Emergency Fund. All medical expenses incurred above $1500 per academic year would automatically be reimbursed to the student from the Health Fund. Special care should be taken to ensure that students’ privacy is not violated during the reimbursement process. In particular students should be encouraged to redact diagnostic and procedure codes from any documentation before submitting it to the Health Fund. The documentation should be reviewed by someone who is not a dean or other faculty member who may have an academic relationship to the student.

- Healthcare costs have been escalating each year for both Caltech and grad students. A long-term solution is needed to remedy this situation. At the April 2, 2020 COVID-19 town hall, then-VPSA Joe Shepherd remarked on the cuts to graduate student health benefits, “Until the United States has a single-payer health system and a great simplification of [the many providers and the various types of cost], we will continue to struggle with this every year.” California Assembly Bill 1400 would create a statewide single-payer health insurance system with no cost to the patient at point of care. We recommend that Caltech endorse AB-1400 (Guaranteed Healthcare for All) and use its lobbying resources to support it.

- We recommend that Caltech cover 100% of the premium cost of health insurance for all graduate students, or automatically adjust the stipend each year in such a way that takes into account rising health insurance premiums.
Access to Healthcare

A possible negative consequence of unaffordable or inaccessible healthcare that is not reflected in the cost data is students avoiding necessary healthcare altogether. This is detrimental to graduate students’ short and long term health, and can also result in larger emergency health expenses later in life.

In last year’s survey we asked how often respondents had avoided needed medical care due to the expected financial burden throughout their time at Caltech (Figure 8a). In order to gather data that is more sensitive to yearly changes to our insurance plan going forward, we modified the question on this year’s survey. We asked how often respondents had avoided needed medical care due to the expected financial burden during the period between September 2019 and September 2020 (Figure 8b). We found that 36.5% respondents reported sometimes or often avoiding medical care due to the expected cost during the 2019-20 insurance year. In last year’s survey, we found that 34.7% of respondents reported the same, but over their entire time at Caltech. Note that one cannot make a direct comparison between the two data sets because of the difference in time range over which the survey was probing. However, the fact that the fraction of respondents reporting avoidance of care due to cost increased slightly even though we shortened the time period in the question suggests that the rate of avoidance of care is at best remaining constant, and may even be increasing. As was the case for out-of-pocket costs, we found a disparity in financially-motivated care avoidance by health status and by gender: in this year’s survey 42.7% of women and non-binary respondents and 44.6% of chronically ill respondents sometimes or always avoided medical care due to cost.

Did you ever stop yourself from seeking medical treatment that you felt was needed due to the expected financial burden during the period …

Figure 8. (a) Frequency of healthcare avoidance due to cost over entire Caltech studies up until May 2019 (b) Frequency of healthcare avoidance due to cost during September 2019-September 2020
Avoidance of healthcare due to cost could be a result of out-of-pocket costs incurred by the insurance plan, but it could also be a result of services and medications not being covered by the insurance plan at all. In addition, certain medications and services are covered by the insurance plan, but require prior authorization. This means that documentation must be submitted to the insurer before accessing the care to prove that you have a certain diagnosis, have tried certain medications already (step therapy), or are being seen by a certain type of specialist. Prior authorization requests can take time to process and can be denied on the basis of opaque criteria internal to the insurance company. Indeed, the company responsible for processing prior authorization claims (Optum) is owned by the same parent company as UHCSR, and there is a financial incentive for them to deny prior authorization claims on administrative technicalities. We asked survey respondents whether, at any point during their time at Caltech, a needed medication or medical procedure was not covered by their health insurance, including denial of prior authorization requests (Figure 9). Our survey shows that 24.1% of respondents required a medication or medical procedure that was not covered by insurance plan, including denial of prior authorization requests, with 36.1% of chronically ill respondents and 31.6% of female respondents experiencing the same.

During your time at Caltech, did you need a medication or medical procedure that was not covered by your health insurance plan? (includes denial of prior authorization requests)

![Figure 9. Fraction of respondents with needed medical care not covered by insurance by demographic categories.](image)

Because of the significant cuts to the student health plan which came into effect in September 2020 and the COVID-19 pandemic, we were interested not just in avoidance of care in the 2019-20 academic year, but also whether students expected to have to avoid care in the coming year (Figure 10). The survey shows that 25.9% of all respondents, 31.0% of female respondents, and 33.5% of chronically ill respondents expected to have difficulty obtaining needed medical care in the 2020-21 insurance plan year, with 33.0%, 37.1%, and 35.6% respectively feeling “unsure.” For those who answered that they expect difficulties in accessing care, we asked for what reasons they expected to encounter difficulties (Figure 11). 67.3% of all respondents cited COVID-19-related difficulties in physically accessing care centers, 58.6% cited prohibitive costs for care under the current insurance plan, and 39.5% cited lack of insurance coverage for procedures and medications, including denials of prior authorization requests.
Do you expect that you will have difficulty accessing medical treatment that you believe is needed during the period Fall 2020 - Fall 2021?

Figure 10. Fraction of respondents by demographic categories expecting to have difficulty accessing healthcare in the 2020-21 academic year.

Reasons for anticipated difficulty accessing care in AY 2020-21

Figure 11. The 303 respondents who answered “yes” or “unsure” to the question of whether they expected to have difficulty accessing healthcare in AY 2020-21 were asked for what reasons they thought they might have difficulty accessing care during this period. Multiple answers were allowed. The “services needed not covered by insurance plan” option was phrased to explicitly include denial of prior-authorization requests.
Recommendations: Healthcare Access

- A higher deductible deters people from accessing care for the first time in a plan year, as there is a risk of suddenly incurring a large medical bill. The UHCSR in-network deductible has increased twice in consecutive years from $150 to $250 to $500. **We recommend selecting a student insurance plan with an in-network deductible no higher than $250, and $500 for out-of-network care.**

- Many commonly used services on the UHCSR plan, such as imaging, lab tests, and physical therapy, have 80% or 60% co-insurance rather than a flat copay. For comparison, [MIT’s student insurance plan](#) has a flat copay of $50 for imaging such as MRIs and CT scans, no cost for lab tests and X-rays, and a flat copay of $10 for physical therapy. Having co-insurance rather than copays makes the cost to grad students unpredictable since it is extremely difficult to find out how much a provider will bill for a particular procedure. **We recommend designing an insurance plan with more flat copays for common types of care.**

- Caltech should take into account the rate of denials of prior authorization requests, and the student experience of having delayed care or inaccessible care due to prior authorization in selecting its insurer.

- Infertility testing and treatments and preservation and storage of reproductive materials are not covered under Caltech’s UHCSR insurance plan. These are covered with a 10% deductible under the MIT student insurance plan. **We recommend that Caltech select an insurance plan that covers infertility and gamete preservation services.**
Caltech Student Wellness Center

A limited number of health services are available at Caltech’s Student Wellness Center (SWC), including primary care, preventative care, gynecological care, and short-term therapy. Health services that are not available at the SWC include x-rays and other imaging, processing of most laboratory tests, vaccines other than the flu shot, specialist consultations, and long-term therapy. Medical care provided at the Student Wellness Center is at no cost to the student regardless of the student’s insurance.

To gauge the utilization of health services outside of the SWC we asked all survey respondents if they had ever used off-campus health services during their time at Caltech. A large majority (70.7%) had used off-campus health services, with even higher proportions when restricting to women and non-binary respondents and chronically ill respondents (Figure 12).

Of those respondents who had used off-campus health services, we asked for what reason(s) they had chosen to go off-campus for healthcare. The most common reason given was that needed services were not offered at Student Wellness Services, with a number of people also citing factors related to COVID-19, privacy, and quality of care (Figure 13). In addition, in the freeform responses, several respondents brought up the limited hours of the SWC, and noted that they needed emergency care on weekends or after-hours. If this question is asked again on next year’s survey, an option for “care needed outside of health center operating hours” should be added.
Figure 13. Respondents who reported going off-campus for healthcare during their time at Caltech were asked for which reasons they sought care off-campus. Multiple selections were allowed.

**Recommendations: Student Wellness Services**

- The health center currently cannot provide any imaging services. **We recommend exploring the feasibility of having in-house diagnostic X-rays**, which would entail appropriately trained staff and new equipment.

- It would be helpful to have resources for good specialists in the area who accept the Caltech student insurance. **We recommend Student Wellness Services keep up-to-date lists of in-network specialists practicing in Pasadena and make these available on the website. It should also be made clear on the website that with the student insurance plan, students may self-refer to specialists** without first seeing a primary care provider.

- **Student Wellness Services should consider what additional services it could offer, and conduct further studies on what services are most commonly needed by Caltech students.**
Mental Health

Mental health issues within graduate education are widespread, with students across universities experiencing chronic mental health conditions such as anxiety and depression during their graduate studies. Recent Science and Nature Biotechnology articles on the topic highlight the need for increased mental health support for graduate students. To better understand the needs of graduate students at Caltech specifically, we asked multiple questions related to mental health in the 2020 Quality of Life Survey.

During the 2019-20 UHCSR plan year, students on the UHCSR plan could attend 25 mental health visits without any copayment. In Spring of 2020, there was a proposal during negotiations between Caltech’s insurance broker (Mercer) and Human Resources to cut the covered mental health visits from 25 to 12, but student advocacy was critical in maintaining the current level for the 2020-21 plan year. This contrasts with MIT, where they have recently increased the number of covered mental health visits to 52 per year.

In order to gauge graduate student utilization of our insurance plan’s mental health benefits, we asked whether respondents had used their 25 covered mental visits in 2019-20. Chronically ill students and women and nonbinary students were more likely to say yes compared to all respondents (Figure 14). While only 13.7% of all respondents used their 25 covered visits, 20.6% of women and non-binary students and 28.0% of chronically ill students did. This further demonstrates that healthcare access is an issue of equity, and any cuts to this access will disproportionately affect these already disadvantaged groups.

![Figure 14. Breakdown of respondents who used their 25 mental health visits with no copay for the insurance year (September 2019 - September 2020). Women and non-binary people as well as people with chronic illness of all genders were more likely to use their mental health visits.](image)

To further understand the climate around mental health on campus, we asked students to indicate their level of agreement or disagreement with statements regarding how different aspects of their experience at Caltech support their mental health (Figure 15). While a large majority (~70%) of students somewhat or strongly agreed
that they feel supported by their peers and adviser, one out of five graduate students responded that mental health and counseling resources on campus are not sufficient. Furthermore, one out of four students feel that the conditions of their work do not support their ability to maintain their mental health. While students may find that they have a personal support system in their adviser and their peers, they often feel that institutional systems are insufficient in meeting their needs. Some advisors will be less willing to provide support to students, and in any case advisors are not a substitute for professional care. Robust institutional systems should assist students regardless of who their adviser and/or peers are, clearly too many people are currently falling through the cracks.

For each of the following statements, indicate your level of agreement or disagreement.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

My peers at Caltech support my ability to maintain my mental health.

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<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
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<tr>
<td>13</td>
<td>43</td>
<td>102</td>
<td>204</td>
<td>152</td>
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My adviser supports my mental health.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
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<tr>
<td>22</td>
<td>50</td>
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<td>149</td>
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The conditions of my work support my ability to maintain my mental health.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
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<td>47</td>
<td>88</td>
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The mental health and counseling resources on campus are sufficient.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
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<tr>
<td>51</td>
<td>59</td>
<td>215</td>
<td>119</td>
<td>64</td>
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</tbody>
</table>

The mental health counseling resources that I am able to access off-campus using Caltech health insurance are sufficient.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
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<th>Neither agree nor disagree</th>
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<th>Strongly agree</th>
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</thead>
<tbody>
<tr>
<td>26</td>
<td>28</td>
<td>268</td>
<td>100</td>
<td>80</td>
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</tbody>
</table>

Figure 15. Fraction of respondents by their level of agreement or disagreement with statements regarding support on campus regarding mental health.

In addition to allowing working conditions that do not support a quarter of graduate students in their ability to maintain their mental health, Caltech lacks institution-wide policies that guarantee graduate students time off to specifically address these mental health concerns. When asked about the level of comfort bringing up taking days off to manage mental health to advisers, nearly one-third of students reported that they feel somewhat or very uncomfortable (Figure 16). In comparison, only about 17% of respondents said they feel somewhat or very uncomfortable asking for two consecutive weeks off for a family emergency. While this may point to a stigma surrounding mental illness in the general population, the onus should not be on students to disclose personal health information with their employer to receive necessary time off. University-wide policies guaranteeing days off specifically for mental health would allow students to take the time they need without having to discuss personal health issues with their advisor.
These results highlight that many (1 in 5) respondents feel that on-campus services are insufficient to meet their needs, and many (1 in 4) are working under conditions that limit their ability to maintain their own mental health. Chronically ill and women and non-binary students disproportionately access mental health services, so any cuts to these services would further disadvantage these groups. Addressing these concerns is essential to ensuring a healthy student body.

**Recommendations**

- One out of five graduate students reported that the mental health and counseling resources on campus are not sufficient. We recommend that Caltech **hires additional staff at the Counseling Center to increase capacity and allow for longer-term care.**

- **MIT offers 52 mental health visits without a copay.** We recommend that Caltech similarly prioritizes the well-being of its students and **selects a health insurance plan that covers 52 mental health visits without a copay.**

- Caltech currently lacks any institution-wide policies that guarantee graduate students time off for mental health. We recommend that Caltech **develops university-wide policies guaranteeing graduate students of days off specifically for mental health in addition to the sick days.**
Use of the Graduate Studies Office Student Emergency Fund

Caltech administrators have often proposed the Graduate Studies Office Student Emergency Fund as a solution to high costs of healthcare. The Emergency Fund is funded by donations, is not endowed, and is generally limited to $30,000-$50,000 (per year), with an informal payout cap of $2,000 given per student per year which may vary depending on the available funds. The fund payouts are added to students’ monthly pay and are subject to income tax. Funding is not guaranteed, and ultimately disbursement decisions are made by the Graduate Studies Office based on availability of funding and other criteria, unknown to students.

In order to study utilization of the Emergency Fund, we first asked students whether they had ever applied and, if they had not applied, for what reasons (Figure 17). We then asked those respondents who had applied to the fund to select the reason(s) for their application, allowing multiple selections since students may apply to the fund more than once per academic year. A total of 50 survey respondents applied to the Emergency Fund during their time at Caltech. Of these, 22 were chronically ill. However, a further 108 students reported not applying to the Emergency Fund because they were unaware that it was available or because they were unsure if they were eligible. This suggests a large number of grad students who could be helped by the Emergency Fund are not applying. In particular, of the 61 respondents who were unsure about their eligibility, nearly half (29) were chronically ill. This might point to a lack of clarity over whether large but predictable health costs resulting from a chronic illness count as an emergency for the purposes of the Emergency Fund. Note also that high healthcare costs for chronic illnesses do not necessarily accrue in one big lump, qualifying as an “emergency,” but might instead accumulate over time.

![Figure 17. Fraction of respondents who applied to the Emergency Fund, who needed the Emergency Fund but did not apply, and who did not need the Emergency Fund.](image-url)
Of the 50 respondents who applied to the fund, 64 unique reasons were given. 34 of them cited health reasons for applying (Figure 18). Moreover, 22 chronically ill students applied for Emergency Funding with 18 of them applying for health-related reasons. We also know from the Grad Office’s records that in AY 18-19 there were 58 unique applications to the fund, with 66% (by dollar amount) of the funding granted for medical and dental, and that in AY 19-20 there were 48 unique applications with 75% of the funding granted for medical and dental. This suggests that health is a major reason for emergency fund applications.

We asked respondents who had applied to the Emergency Fund whether their request was ultimately funded. Of the 50 respondents who applied, 20 said their request was fully funded, 23 said their request was partly funded, and 4 said their request was denied. The majority of respondents who said their request was partly funded reported a funding level between 41% and 80%. Of the 22 chronically ill respondents who applied to the fund, 5 reported full funding and 14 reported partial funding.

Finally, we were interested in whether the process of applying to the Emergency Fund felt like an invasion of privacy to students, given that documentation such as medical bills that must be submitted as part of the application process may contain details of specific medications or medical procedures. Of the respondents who had applied to the Emergency Fund, 19 out of 50 somewhat or strongly agreed that they had to provide sensitive information that made them feel uncomfortable. However, a larger proportion (13 out of 22) chronically ill respondents said the same (Figure 19).
Agreement with the statement, "Did you feel that you had to provide sensitive information that made you uncomfortable?" for Emergency Fund applications

Figure 19. Those respondents who indicated that they had applied to the Emergency Fund were asked to rate their agreement with the statement “Did you feel that you had to provide sensitive information that made you uncomfortable?” Responses are shown by health status.

The data above point to several limitations with using the Emergency Fund as a solution to the rising costs of healthcare for graduate students. First, many students who could benefit from the fund are unaware of its existence or unsure whether they are eligible. Second, the fund does not cover the full cost of health expenditures. It seems that a large fraction of requests are only being partially funded. In addition, the payouts are taxed as income. Finally, the current application process makes chronically ill students in particular feel that they have to share private information that they are not comfortable sharing.
Recommendations: Student Emergency Fund

- As detailed previously, we believe the most important action is to select an insurance plan with a low out-of-pocket maximum. Failing that, we have detailed a plan for a Health Fund separate from the Emergency Fund. However, there are also several small improvements that could be made to the Emergency Fund in the interim.

  - Issue clarification that large health costs incurred while treating chronic illnesses are covered by the Emergency Fund.

  - Encourage applicants to redact diagnostic or procedure codes from documentation they submit as proof of payment during their Emergency Fund application.

  - Have applications reviewed by someone who is not a graduate dean or other faculty member.

  - Investigate alternative payment mechanisms that do not result in Emergency Fund payments getting taxed, or increase payments to take account of taxation.
Dependent Healthcare

In this section we will focus on the healthcare costs for graduate students with dependents. For a more comprehensive analysis of the disproportionate costs faced by graduate students with dependents in general, see the Expenses section of the 2020 GSC Survey Report. As evidenced in that section, the tight budgets of graduate students with dependents leave little wiggle room for unexpected medical emergencies that may lead to high costs.

Under the 2019-20 insurance plan, graduate students with dependents could enroll their dependents in the Caltech health plan for an annual charge of $2,726 for a spouse/domestic partner or single child, $5,452 for a spouse/domestic partner and one child or two or more children, and $8,178 for a spouse/domestic partner and multiple children. To supplement the cost of the premium and any additional healthcare costs, the Graduate Studies Office provided a Dependent Healthcare Supplement of $120/month (or $1,440/year) during the 2019-20 plan year. This has since increased to $140/month (or $1,680/year, an increase of $240/year from 2019-20). This increase was not sufficient to cover the increase in premium costs (a $412 increase for a spouse/domestic partner or single child). As with the Student Emergency Fund, reimbursements from the Dependent Healthcare Supplement are taxable as income. Additionally, some students have reached out to the GSC Health Committee stating that they have yet to receive any communications regarding their Dependent Healthcare Supplement at the time of writing this report, despite having submitted requests some time ago.

Overall, many graduate students with dependents struggle to make ends meet. This is evidenced by the use of the Emergency Fund where 23% of graduate students with dependents have applied compared to only 8% without. Of these applications, nearly half of these emergencies (three out of seven total requests) were for health reasons.

Recommendations: Dependent Healthcare

- Graduate students with the dependents already have to cover a variety of unique expenses such as childcare (up to $25,000 - $29,000 for some). To prevent further burden to this population, we recommend that Caltech covers the full premium for dependents.

- Barring that, we recommend that the Dependent Healthcare Supplement should at least cover 80% of the premium cost for dependents to be in line with what Caltech pays for the rest of the graduate population. This should automatically increase each year if the premium changes.
Trans Healthcare

Due to small numbers, we will not share numerical data regarding students’ experiences with transgender healthcare. Instead we will share general concerns reported by survey respondents. Primary concerns include a lack of access to trans healthcare services and great need for improvement in understanding the requirements of and providing care for transgender individuals.

The new medical director of Caltech’s health center should be respectful of transgender individuals and knowledgeable about their medical needs. Studies show that fear of discrimination or medical providers’ unfamiliarity with transgender identity and healthcare were major reasons for delaying care. Students’ asks for a medical director that demonstrates competency in trans healthcare (e.g. expertise in hormone dosages and frequencies) should thus be a non-negotiable requirement in the hiring process.

Trans students reported several issues with access to care. While hormone prescriptions can be renewed at the health center, students expressed that this fact was not well-known and should be better publicized. Furthermore, for people who wish to begin hormone replacement therapy (HRT) without an existing prescription from a healthcare provider, options are limited on the student insurance plan, with providers located far away from campus (at distances inaccessible without a car). One proposal was to ensure that student insurance covers services at Planned Parenthood Pasadena, which would allow people to acquire a new prescription and start HRT under medical supervision within a short bus ride of Caltech’s campus.

Gender affirming surgeries or procedures (e.g. facial surgeries, voice training, hair removal, gamete preservation) are often not covered by insurance and are sometimes wrongly classified as cosmetic. Even when such procedures are covered, they can be prohibitively expensive.

There is a lack of in-network providers that express that they are able to work with transgender people. This forces transgender students to look out-of-network, and as noted earlier, the out-of-network costs are much higher and accrue separately from the in-network out-of-pocket costs. Furthermore, on its wellness website, Caltech advertises St. John’s Transgender Health Program as one of the four centers where transgender individuals can access comprehensive services. In 2019, St. John’s was removed from the UHCSR network without informing the trans students who were using the services there. In one case this resulted in a student having to leave the hospital after finding that the necessary services were no longer covered.

Insurance companies require a supportive letter from a mental health professional in order for gender-affirming surgeries to be covered. Access to medical transition is thus limited by access to mental health professionals who are willing and able to provide a letter of support. These dynamics force transgender people to forgo necessary medical treatment or else access it at a much increased cost.
Recommendations: Trans Healthcare

- Hire a medical director who understands transgender healthcare and respects transgender people.

- Select a student health insurance plan that covers comprehensive transgender healthcare including gamete preservation, hair removal, voice training, and facial gender confirmation surgery.

- Increase the accessibility of hormone replacement therapy (HRT) by selecting a student health insurance plan that covers providers that can provide new prescriptions, and publicize the Student Wellness Center’s ability to provide hormones to those with existing prescriptions.

- Select a student health insurance plan that includes in-network mental health providers who are able to work with transgender people, particularly providers who are certified by the World Professional Association for Transgender Health (WPATH).

- Explicitly list which transgender health procedures are covered in the student insurance plan, to provide greater transparency and accessibility of transgender healthcare.
Discomfort with the US Health Insurance System and Caltech Health Insurance

The US private healthcare industry can be bewildering for many, particularly those who lived in countries with simpler, easier-to-use health systems, or those who are navigating the US system alone for the first time. Lack of comfort with the health insurance plan can become a barrier for those who need medical care, especially as students may be wary of significant unexpected costs. The GSC survey asked students about their comfort using their health insurance, finding that 28.5% of respondents were somewhat or very uncomfortable using the Caltech plan (see Figure 20). This proportion is similar between domestic and international students.

Anecdotally, many students are unaware of basic facts about their insurance plan, expressing confusion about terms such as ‘in-network/out-of-network’ and ‘out-of-pocket maximum’. Graduate students are often nervous about the prospect of needing emergency care, as they are unsure of the possible costs. Even after studying the system, students have wound up with significant unexpected fees, for example when they unknowingly receive out-of-network services at an in-network hospital. Students moving from abroad who require treatment for specific conditions have shared that the process of finding a specialist in advance of coming to Caltech is difficult. Some of these issues are addressed on Caltech’s website, however the fact that there is still widespread confusion suggests that this information is not getting to students.

In order to address this discomfort and confusion, the GSC Health Subcommittee held a ‘UHCSR Health Insurance 101’ workshop in Fall Term to help clarify confusion and walk students through how to use the plan. While this was helpful to many graduate students on campus, it required a significant amount of effort on the part of the Health Subcommittee, and relied on students who had acquired a detailed knowledge of the US healthcare system. Similar workshops have been put on in the past involving Caltech staff, however we feel it is important that these workshops happen regularly, in particular during the new student orientation, and that they do not rely on the initiative of a small number of graduate students.

At a minimum, every graduate student should have an understanding of simple health insurance terminology, and the specifics of what to do during emergencies (e.g. using urgent care, calling an ambulance, visiting the emergency room). Also, incoming graduate students requiring specialist care should be supported through this process well in advance of their arrival, to avoid any extra burden and confusion on top of what can already be a stressful process. Below we make several recommendations to these ends.
How comfortable do you feel using the Caltech health insurance plan? (2020)
(e.g. finding an in-network provider, understanding the billing process, etc.)

Recommendations: Discomfort with Insurance

- Caltech should designate a staff member who can assist newly admitted graduate students with ensuring continuity of medical care prior to their move to Caltech. This designated staff member could assist, for example, by explaining the US health insurance system, explaining that students may self-refer under the UHCSR PPO plan, and providing lists of specialists accepting UHCSR insurance in the Pasadena area. Their contact information should be included in the welcome packet for new students.

- Caltech should put on a health insurance workshop during graduate student orientation so that all students have a good knowledge of the healthcare system, and how they should go about getting the care they need, particularly in emergency situations. An example Health Insurance workshop hosted by the GSC in Fall 2020 can be found here.

- Give all incoming students an information packet including a glossary of terms and the specifics of how to get emergency care, including the likely costs and locations of in-network urgent care providers near campus.
Healthcare Advocacy at Caltech

Currently, the only formal role for student input into the student health insurance plan is participation in the Faculty’s Standing Health Committee (FSHC), an advisory committee of the Faculty Board, which comprises a number of Human Resources staff, upper-level administrators, faculty members, and (typically) two graduate students and at least one undergraduate student. Human Resources hires a third-party negotiating firm, Mercer, to make a recommendation to the Faculty Board, and then a person or body unknown to the GSC makes the final decision on the student health insurance plan. The FSHC meeting minutes are not publicized.

In March 2020, facing the prospect of an increased deductible, out-of-pocket maximum, and physician copay and a reduction in the number of covered mental health visits, the graduate student representative on the FSHC contacted all graduate students to solicit their input on how the cuts to the health insurance plan would affect them. Despite the objections of the graduate student representative and input from many graduate students, the FSHC recommended all cuts to health benefits, except the cuts to the number of covered mental health visits, without a vote. In April and May of 2020, students organized an autonomous campaign of the Graduate Student Council Health Subcommittee called Caltech for Affordable Healthcare (CAH).

CAH utilized 2019 GSC Quality of Life Data, healthcare testimonials from graduate students, and input from 260 graduate students who attended a town hall to develop a petition calling on Caltech to make no further cuts to student health insurance benefits and to make the health insurance decision-making process more transparent. This petition, signed by 42.6% of graduate students, was delivered to the administration on May 1, 2020. The petition and student testimonials can be found on CAH’s website.

On May 6, 2020, Caltech administrators emailed the graduate student body with the finalized health plan, which included the large increase in the deductible and out-of-pocket maximum, but maintained the level of covered mental health visits and the physician copay; at the same time they also made no changes to the level of transparency in the health benefits decision-making process. While GSC members, which include the current graduate student representatives on the FSHC, have reached out to the Caltech administrators several times to ask for their rationale behind not meeting the vast majority of petition demands, we have received a combination of silence and a suggestion that we channel our concerns through the FSHC representatives.

Data from the GSC Quality of Life survey has been a critical component of student healthcare advocacy, and along with understanding the landscape of student healthcare access we seek to change and improve it. This survey report has hopefully demonstrated that the health needs of graduate students are diverse, with women and nonbinary students and chronically ill students requiring particular care and attention. One or two students on a purely advisory committee cannot encompass such a wide range of health needs and perspectives. Therefore, we recommend that the GSC Healthcare Subcommittee play a substantive role in shaping the student health insurance plan.
Recommendations: Transparency and Graduate Student Input

● Before the Faculty’s Standing Health Committee discusses the student health insurance plan, inform the student body of proposed policy changes and bids from alternative insurance companies and open a comment period.

● Require that a majority of the Faculty’s Standing Health Committee vote to approve decisions about the student health insurance plan before it makes its recommendation.

● Submit the annual recommendation of the Faculty’s Standing Health Committee on the content of the next year’s student health insurance policy to the GSC Healthcare Subcommittee for approval by a vote before it is presented to the administration.

● Publicize the Faculty’s Standing Health Committee meeting minutes and recommendations relevant to graduate students among the graduate student body.

● Provide the Faculty’s Standing Health Committee with a cost study – conducted by the appropriate offices – of any health insurance plan changes to both Institute and graduate student finances before it makes a recommendation.
Acknowledgements

We would like to thank Lindsey Malcom-Piqueux and Caltech’s Institutional Research Office for helping to design the Quality of Life Survey, and collecting and aggregating the data. We would also like to thank the GSC Advocacy committee and its chair, Charles Guan, for creating and distributing the Quality of Life Survey. Finally, thank you to all the graduate students who took time to fill out the Quality of Life Survey; your participation is crucial to effective advocacy.