Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce

Cialina L. Moy
University of San Francisco, clmoy@dons.usfca.edu

Follow this and additional works at: https://repository.usfca.edu/capstone

Part of the Nursing Commons

Recommended Citation
Moy, Cialina L., "Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce" (2022). Master's Projects and Capstones. 1317.
https://repository.usfca.edu/capstone/1317

This Project/Capstone - Global access is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.
Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce

Cialina Lynn Moy, RN, CNL

University of San Francisco

N653: Quality Improvement Internship

Nicole Beamish, DNP, APRN, PHN, CNL

May 13, 2022
# TABLE OF CONTENTS

Section I: Abstract  
Section II: Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce  
   - Setting  
   - Additional Settings  
   - Problem Description  
   - Mental Health Champions  
   - Team Temperature Checks  
   - Available Knowledge  
   - PICOT  
   - Literature Review  
   - Rationale  
   - Conceptual Framework  
   - Specific Aim  
   - Global Aim  

Section III: Methods  
   - Context  
   - Intervention  
   - Project Timeline  
   - Cost Analysis  
   - Study of the Interventions  
   - Measures
Section IV: Results 19

Section V. Discussion 21
  Summary 21
  Limitations 23
  Recommendations for Future Research 25
  Conclusion 27

Section VI. References 29

Section VII. Appendices 31
  Appendix A: Statement of Non-Research Determination Form 31
  Appendix B: John Hopkins Individual Evidence Summary Tool 32
  Appendix C: Evaluation Table/IHI Framework for Improving Joy in Work 33
  Appendix D: Microsystem Assessment 34
  Appendix E: SWOT Analysis 35
  Appendix F: Fishbone Diagram 36
  Appendix G: PDSA Cycle 37
  Appendix H: Pre-Survey Questionnaire and Flyer 38
  Appendix I: Intervention Flyer and Response Table 41
  Appendix J: Post-Survey Questionnaire and Flyer 43
  Appendix K: Intervention Outcomes Bar Graph 45
Section I: Abstract

Problem: Nursing burnout has been an existing phenomenon, which the COVID-19 pandemic has only exacerbated. Burnout has contributed to escalated mental health concerns, increased staff turnover rates, and the nationwide nursing shortage.

Context: Studies indicate that depression, anxiety, and stress significantly correlate to burnout; studies also reveal that burnout consequently contributes to job dissatisfaction and organizational turnover. To reduce perceived burnout and increase nurse retention at the ambulatory COVID-19 clinics, nurses completed a pilot program that integrated two mental health tools.

Intervention: Nurses responded to a pre-survey to identify burnout factors and measure perceived burnout, using a modification of the Copenhagen Burnout Inventory (CBI) tool. Then, nurses participated in the pilot program incorporating daily "team temperature checks" during mid-shift huddles with an assigned Mental Health Champion for the duration of one workweek. After completion, nurses responded to a post-survey to reevaluate perceived burnout.

Measures: The project measured changes in perceived burnout measurement scores by evaluating pre and post-survey responses pertaining to the CBI. The project also assessed the nurses' endorsement of Mental Health Champions and "team temperature checks."

Results: The contributing reasons leading to nursing burnout were attributed to shift workload, unsafe staffing, high-stress environment, and emotional strain. Results from the post-survey indicate a decrease in perceived burnout measurement scores; results from the post-survey also suggest that most surveyed nurses favored the interventions.

Conclusions: Institutions are urged to consider these interventions to promote their staff's mental health and well-being, thus improving workplace culture and staff retention rates.

Keywords: burnout, occupational stress, mental health, champion, temperature check, nurse turnover, nurse retention, COVID-19, Copenhagen Burnout Inventory
Section II: Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce

Nursing burnout has been an existing phenomenon, which the COVID-19 pandemic has only exacerbated. Burnout refers to physical and emotional exhaustion caused by chronic exposure to emotionally demanding situations, particularly in people-oriented occupations like health care. Burnout among the nursing workforce is strongly correlated to job dissatisfaction and intent to leave (Montgomery et al., 2021). Despite resiliency and adaptation to repeated surges of COVID-19, nurses continue to leave the workforce at an exponential rate. The national turnover rate for staff RNs in 2020 was 18.7%, an increase of 2.8% from the previous year (Nursing Solutions, Inc., 2021). There is an increased demand for nurses to fill vacancies in healthcare systems, particularly at entities designed to support the COVID-19 crisis; yet, healthcare systems fail to implement solutions to retain the nurses they hire.

This Quality Improvement project identified and measured burnout among a nursing workforce in San Jose, California. This analysis provided a foundation to conduct a pilot program that initiated two mental health tools. Ambulatory clinic nurses participated in the pilot program by practicing daily "team temperature checks" with an assigned Mental Health Champion (MHC) during mid-shift huddles. This pilot program aimed to help the nursing workforce identify burnout, alleviate burnout, and improve staff retention rates.

Setting

This project observed the ambulatory clinics of a public healthcare system in Santa Clara County. The clinics primarily served patients seeking COVID-19 related services, such as vaccinations, booster shots, and PCR testing. Although there are nine clinics, the project
concentrated on two ambulatory locations in San Jose; for reference purposes, this project will refer to the two clinics as Clinic A and Clinic B.

The clinics’ nursing workforce and ancillary staff would work diligently in teams to provide COVID-19 related services. At both sites, nurses were either stationed to work at the outdoor COVID-19 PCR testing tents or the indoor COVID-19 vaccination and booster clinics. Nurses assigned to these services all received the same onboarding training pertaining to the service workflows, charting, and current vaccination policies. At the time of the pilot program intervention in April 2022, Clinic A’s PCR testing tent operated on Monday through Friday; Clinic B’s PCR testing tent only operated on Saturday and Sunday.

**Additional Settings**

Because nursing burnout is a phenomenon occurring within a multitude of healthcare systems, the project initially extended research to include nurses who work in neighboring Bay Area hospitals. The additional observed sites classify as private healthcare systems within a 50-mile radius of the ambulatory clinics, and nurses from these sites primarily reported working in the acute inpatient setting. The collected data from additional sites served purposefully to assess burnout across a multitude of healthcare settings within the Bay Area. However, because the environments starkly contrasted and did not pertain to the publicly-owned ambulatory clinics, the data from additional sites were excluded when identifying the project’s focused concern.

**Problem Description**

Nursing burnout is a result of chronic stress characterized by emotional exhaustion and physical fatigue. Burnout also correlates to levels of depression, anxiety, and stress symptoms (Creedy et al., 2017). Chronically placing nurses in these stressful conditions can result in detrimental consequences, such as job dissatisfaction and intent to leave (Montgomery et al.,
2021). It is crucial to find appropriate interventions that support nurses’ mental health to alleviate burnout, especially for a nursing workforce that directly combats the COVID-19 crisis.

The project began by brainstorming the possible solutions that would better support nurses and alleviate their feelings of burnout. This brainstorming process provided an array of ideas, such as increasing staff, compensation, educational reimbursement, providing mental health days off, and other possible solutions that would require fiscal expenditure from the facility’s direct costs. Because of the project’s timeframe and push-and-pull factors related to the organization’s likelihood of adopting the intervention, the brainstorming process also included ideas that would require minimal to no cost. Two change ideas that resonated, and are common tools within daily nursing practice, include nurse champion roles and “temperature checks.”

**Mental Health Champions**

Several project group members reported familiarity with nurse champion roles in their healthcare workplaces. Nurse champion roles are a common practice, which refers to self-identified employees who embody a genuine interest in supporting their colleagues by promoting evidence-based practices and improving the quality of care (White, 2011). For example, the Mayo Clinic utilizes nurse champion roles in their Well-Being Champion Programs (WCP) at a multitude of their medical centers. Their worksites participating in WCP allow their nurse champions to “promote programs of personal and work group interests” related to improving well-being, stress management, team building, and social interaction (Wieneke et al., 2019). The project identified that the organization needs solutions to alleviate burnout and its impact on their nurses’ mental health and well-being; thus, the project utilized this adaptive idea to incorporate MHCs in the daily nursing practice at the observed ambulatory clinics.

**Team Temperature Checks**
Two project group members reported that “temperature checks” are common at their healthcare workplaces. “Team temperature checks” are a staff engagement and communication tool used to create camaraderie and cohesion (Choose People, n.d.), which are often performed midday during a shift huddle to gauge and report how employees feel. This tool allows employees to identify and signal when they or their colleagues need help. For example, Choose People considers three-and-a-half questions to ask and engage their employees during a regular check-in (Choose People, n.d.). This project utilized this idea to incorporate “team temperature checks” in the daily nursing practice at the observed ambulatory clinics. The questions inspired by Choose People’s “team temperature checks” include:

1. On a scale from 1 (best you have been) to 10 (worst you have been), how are you doing today?
2. What contributes to that number?
3. What could make it one point lower?
3.5. If higher or lower than the last time, what has changed?

Checking in with colleagues and performing “team temperature checks” during a mid-shift huddle mirrored a component of the Creating Learning Environments for Compassionate Care (CLECC) program. Bridges et al. (2018) conducted a mixed-methods randomized controlled trial when observing the several interventions of the CLECC program, including a nursing staff intervention called cluster discussions. Nurses and an appointed practice development nurse performed five-minute cluster discussions during a mid-shift huddle in their respective inpatient nursing wards. This study monitored this intervention for an ongoing process of four months. The mid-shift cluster discussions “focused on establishing how the individual staff are at the moment in that context and provides opportunities for the group to offer help and support to
members when difficulties are identified” (Bridges et al., 2018). Mid-shift cluster discussions, similar to the project’s “team temperature checks,” provide opportunities for nursing staff to identify, address, and support the well-being and mental health of their colleagues.

Available Knowledge

The generation of a PICOT question guided the project's research. The PICOT question distinguished the project's population of interest, proposed interventions, comparable variables, the outcome of interest, and the projected time frame. The PICOT question aided the project group members in critiquing pertinent articles during a literature review.

PICOT

The project’s PICOT question was, “Among the nurses assigned to Clinic A, does the implementation of MHCs and “team temperature checks,” compared to no intervention among nurses at Clinic B, reduce perceived burnout after one workweek?”

The population of interest was the ambulatory clinic nurses at Clinic A and B; the proposed interventions include the incorporation of MHCs and “team temperature checks”; the comparable variable was the change in perceived burnout, using the Copenhagen Burnout Inventory (CBI) tool to measure burnout; the outcome of interest was a reduction in perceived burnout; the projected time frame was one workweek.

Literature Review

A review of the literature written on nursing burnout, burnout measurement tools, nurse retention, and interventions related to improving the mental health and well-being of the nursing workforce was conducted using the CINAHL Complete database. The literature was appraised using the John Hopkins Individual Evidence Summary Tool (Appendix B), which derives from
the 2022 revision of the John Hopkins evidence-based practice for nurses and healthcare professionals: Model and guidelines (Dang et al., 2022).

Faltalah (2021) performed an integrative review to critically appraise pre- and post-COVID-19 literature written on nurse turnover predictors. Using a modified John Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal tool, this review critiqued 43 peer-reviewed studies written between 2016 and 2021. Before the pandemic, the common predictors of nursing turnover were related to job satisfaction, commitment, and leadership style (Fatalah, 2021). After the COVID-19 pandemic increased the demand and workload, intentions for nurse turnover were related to fear of the disease, anxiety, and heightened stress (Fatalah, 2021).

Montgomery et al. (2021) examined the psychometric properties of the Copenhagen Burnout Inventory (CBI) to determine if the tool is suitable for measuring burnout among nurses. Compared to the gold-standard psychological assessment instrument, Maslach Burnout Inventory (MBI), the CBI is cost-effective and can be utilized to measure levels of staff burnout without licensing costs. Through an online survey distributed to staff nurses practicing in Alabama, Montgomery et al. (2021) found that the CBI demonstrates adequate validity and reliability in measuring the three domains of burnout related to personal, work-related, and client-related factors. They also identified that nursing burnout strongly correlated to job dissatisfaction, which is critically significant for healthcare administrators and nurse leaders to know for recruiting and retaining purposes.

Wieneke et al. (2019) performed a cross-sectional study to evaluate if the presence or absence of a Well-Being Champion Program (WCP) had a demonstrable impact on select personal and organizational measures of interest of the Mayo Clinic. The organization’s WCP
was introduced in 2011, allowing self-identified employees to champion the role and engage their colleagues in activities that promote well-being. WCP has been identified as a high-reach strategy to enhance employee participation in broader wellness initiatives, promote a culture of health and wellness at the worksite, and impact workplace healthy living behaviors. Staff champions are “given the autonomy to promote programs of personal and work group interest,” covering several domains of well-being, including physical activity, stress management, team building, and social interaction (Wieneke et al., 2019). The Mayo Clinic performs an enterprise-wide All-Staff survey every two years to their employees spread across medical centers nationwide. The 2018 All-Staff survey results exhibited 73% response rate of 46,787 employees. Respondents who reported having a WCP viewed personal and organizational measures more favorably than respondents who did not report having a WCP at their worksites.

Wharton et al. (2021) highlighted the importance of having well-being champions who can promote self-reflective practices, self care, and protection of well-being among nurses in the ICU setting. An ICU in Aylesbury, England, used a bottom-up approach to integrate well-being champions among frontline staff who have been enduring the consequences of the prolonged COVID-19 pandemic, which include exposure to moral distress, mental distress, post-traumatic stress disorder, and depression. Their well-being champions provided approachable peer-to-peer support for colleagues who may feel reluctant to speak openly with managers about their emotional concerns. The well-being champions were supported by their nurse manager and dedicated psychologist, who all undertook psychological first aid training (Wharton et al., 2021). The appointed nurses who embodied the well-being champion role served as representatives to promote self-care practices, support their colleagues, and create workplace camaraderie in a rapidly changing environment during the uncertain COVID-19 crisis.
Bridges et al. (2018) conducted mid-shift cluster discussions as an ongoing intervention of their CLECC program in a randomized control trial observed in inpatient nursing wards for four months. An appointed practice development nurse facilitated daily cluster discussions during a mid-shift huddle that took no longer than five minutes to complete. The mid-shift cluster discussions provided an open-format group conversation for colleagues to discuss their feelings and if they needed support. Participants reported good attendance and engagement during the cluster discussions; some also noted that the discussions provided the space to identify colleagues’ needs and when additional support may be required (Bridges et al., 2018). Mid-shift cluster discussions allow nursing staff to identify areas of need among their colleagues, provide the opportunity to offer peer-to-peer support, and equip the team with appropriate tools to improve the well-being of their peers.

**Rationale**

**Conceptual Framework**

This project used The Institute for Healthcare Improvement (IHI) Framework for Improving Joy in Work, which serves as a guide for healthcare organizations to engage staff in identifying key efforts that improve joy in work (Perlo et al., 2017). This framework outlined four steps that leaders can take to nurture joy in the workforce (Appendix C); this project considered these four steps when identifying, planning, and executing an intervention that caters to the nursing workforce.

In addition, this framework suggested designating a senior leader champion that can involve colleagues in facilitating change improvement (Perlo et al., 2017). This suggestion inspired the project's intervention of incorporating MHCs who can facilitate "team temperature checks" during a mid-shift huddle in the workplace. The project identified MHCs as leaders who
can provide approachable peer-to-peer support, as nurses may feel reluctant to speak openly with managers (Wharton et al., 2021). This bottom-up approach aimed to collect honest and raw feedback from nurses, who have more face-to-face contact with each other than their managers. This approach also allowed MHCs with the opportunity to increase staff engagement amongst their peers.

**Specific Aim**

The specific aim of this project was to reduce the nurses' perceived burnout by comparing pre- and post-survey burnout measurement scores pertaining to the CBI. Another objective of this project was to evaluate if nurses favored the project's mental health intervention tools. The project proposed that integrating daily mid-shift huddle "team temperature checks" with MHCs would reduce scores of perceived burnout, ideally by 15% for each CBI survey question, after implementing the pilot program for one workweek. The goal was to provide purposeful and cost-effective interventions that support nurses’ mental health and well-being.

**Global Aim**

Reducing perceived burnout among ambulatory clinic nurses provides a small solution to a larger organizational issue. Nursing burnout has been an existing phenomenon, serving as a reason for nurses to leave the profession; because this phenomenon has worsened due to the impacts of COVID-19, the organization has witnessed escalated mental health concerns and peak turnover rates among their nursing workforce. The entity’s turnover rate for the 2021 fiscal year was 9.2%, which increased from 7.4% in 2020 (County of Santa Clara Employee Services Agency, 2021). Additionally, the organization’s retention rate was 92.2% in 2021, which slightly decreased from 92.9% the previous year. (County of Santa Clara Employee Services Agency, 2021).
The organization's leadership must begin accepting and implementing change projects that boost job satisfaction, employee engagement, and other retention factors that encourage employees to stay in the profession. Implementing this change has the potential to reduce job dissatisfaction and intent to leave. Thus, the project's global aim was to increase the organization's nurse retention rates by 5% by the 2022 fiscal year. Due to time constraints, the project did not include an examination of the organization’s nurse retention rates. However, the project encourages the organization to perform a longitudinal study to examine the long-term effects of such quality improvement initiatives and their impact on nurse retention rates.

**Section III. Methods**

**Context**

The project utilized several research tools to observe, identify, and evaluate the study’s setting, population, and standard daily practices. The project included a microsystem assessment to assess the 5 P’s - the purpose, professionals, patients, processes, and patterns (Appendix D). It also included a SWOT analysis to evaluate the strengths, weaknesses, opportunities, and threats specific to the organization’s COVID-19 ambulatory clinics (Appendix E). Evaluation of the microsystem provided valuable insight that supported the identification of the study’s root problem, exhibited through a cause-and-effect tool called a fishbone diagram (Appendix F). In addition to assessing the microsystem and identifying the root problem, these research tools assisted the formulation of the project’s specific aim. After generating the specific aim, project members created a Plan, Do, Study, Act (PDSA) cycle to organize and structure the necessary steps to execute the change at the ambulatory clinics (Appendix G).

The project utilized a mixed-methods approach with a quasi-experimental design. The pre-survey collected qualitative and quantitative data by identifying burnout factors and
measuring perceived burnout using a modification of the CBI tool. The pre-survey included 17 questions in total: Five questions were designated to gather demographic information pertinent to the respondent’s nursing role; five Likert-scale questions from the CBI tool were designated to retrieve perceived burnout measurement scores; and seven questions were designated to identify workplace resource availability, sources of burnout, and the consideration of intent to leave (Appendix H). The project utilized the host survey platform, Qualtrics, to distribute the pre-survey via email and in-person using a generated QR code on a pre-survey flyer (Appendix H). The pre-survey invitation and flyer included a brief study aim, link to the Qualtrics platform, and contact information of the researchers. Nurses responded by accessing the survey through the provided link in the email, on their mobile phones after scanning the QR code, or by handwritten response using hard copies of the survey. Data from the pre-survey assisted in identifying sources of workplace burnout and perceived burnout measurement scores. This analysis provided a foundation to conduct a pilot program that initiated the two mental health tools.

The pilot program was conducted for one workweek at Clinic A during its hours of operation between Monday, April 4, to Friday, April 8, 2022. Two project group members initiated the program on Monday, April 4, with assistance from their Quality Improvement advisor, who helped identify two MHCs. One MHC oversaw nurses assigned to the indoor COVID-19 vaccination and booster clinics, and the other MHC oversaw nurses stationed to work at the outdoor COVID-19 PCR testing tents. The two project group members gave an elevator pitch to explain the interventions, which included a description of the current and potential role of the MHC, instructions on how to perform the “team temperature checks” during a mid-shift huddle, the determined timeline, and the resources that the MHC can utilize. Resources included
a flyer with the pilot program's aim, instructions to perform the intervention, the contact information of the researchers, and a scannable QR code for nurses to submit electronic responses of their daily "temperature check" (Appendix I). The QR code would link employees to answer the three-and-a-half “temperature check” questions on Qualtrics. In addition, the project provided a hard copy data table for the MHCs to record “temperature check” responses if they preferred to submit handwritten responses (Appendix I).

After completing the pilot program, nurses at Clinic A and Clinic B were asked to complete the post-survey on Qualtrics distributed via email and in-person using a generated QR code on a post-survey flyer (Appendix J). The post-survey invitation and flyer included a brief study recap, link to the Qualtrics platform, and contact information of the researchers. The post-survey included 11 questions: Five Likert-scale questions from the CBI tool aimed to retrieve the perceived burnout scores; one question determined the respondent’s assigned clinic site; and five questions evaluated the nurses’ endorsement of the interventions. Post-survey responses of the intervention group at Clinic A and the control group at Clinic B were evaluated.

**Intervention**

The objective of this project was to initiate a pilot program that encouraged nurses at Clinic A to participate in daily “team temperature checks” with their assigned Mental Health Champion for a duration of one workweek. The interventions would occur during a mid-shift huddle before the nurses’ collective lunch break. The interventions in the pilot program aimed to reduce perceived burnout, thus improving staff retention rates among the ambulatory clinic nurses. To evaluate the effectiveness of the interventions, data collected from the intervention group at Clinic A was compared to data received from the control group at Clinic B.

**Project Timeline**
Project group members scheduled a team meeting with the Quality Improvement advisor on January 29, 2022. Microsystem assessment and site observations of Clinic A and Clinic B occurred between February 8 to March 3, 2022. All nurses were encouraged to respond to the pre-survey from March 14 to April 2, 2022. The pilot program was incorporated into daily practice at only Clinic A from April 4 to April 8, 2022. On April 4, the two appointed MHCs received education about their roles, exhibited receptiveness to the assigned tasks, and assumed responsibility the same day. After completing the pilot program, nurses at Clinic A and Clinic B were encouraged to respond to the post-survey from April 10 to April 15, 2022.

Cost Analysis

The pilot program contained interventions to reduce perceived burnout, improve workplace culture, and impact staff retention outcomes at no cost. During the pilot program, the employees appointed as MHCs did not receive additional compensation or financial incentive. Additionally, the “team temperature checks” were performed without cost. Perceived burnout was measured using the CBI, an evidence-based burnout measurement tool that does not require licensing fees.

The interventions of the pilot program can potentially reduce direct costs related to nursing turnover. The average turnover cost for a bedside nurse is $40,038, resulting in an average hospital loss of $3.6 to $6.5 million per year (Nursing Solutions, Inc., 2021). A percent change in the nurse turnover rate is estimated to cost or save the average hospital an additional $270,800 per year (Nursing Solutions, Inc., 2021).

Study of the Interventions

The project used a modification of the CBI, a 19-item burnout measurement tool that uses three subscales that examine personal, client, and work-related burnout. The CBI can be
compared to the gold-standard MBI tool, which measures burnout in emotional exhaustion (EE),
depersonalization (DP), and personal accomplishment (PA). The caveat of MBI is that it is not
free and requires licensing fees; additionally, researchers argue that the domains of DP and PA do
not specifically pertain to burnout (Creedy et al., 2017). Therefore, the project group members
opted to utilize components of the CBI, as the burnout measurement tool demonstrated adequate
validity and reliability in measuring the three subscales of burnout compared to the gold-standard
MBI (Montgomery et al., 2021).

**Measures**

The project modified the CBI to include five Likert-scale questions pertinent to the study.
The questions include: (1) “Do you feel burnout because of your workload?”; (2) “Are you
exhausted in the morning at the thought of another day at work?”; (3) “Is your work emotionally
and/or physically exhausting?” (4)” Do you have enough energy for your family and friends
during non-working hours?”; and (5) “Do you find it hard to work with your patients?”
Questions #1, #2, and #4 evaluated work-related burnout, question #3 evaluated personal
burnout, and question #5 evaluated client-related burnout. The five questions were included in
both the pre- and post-surveys to measure perceived burnout before and after implementation of
the interventions.

In addition to measuring perceived burnout measurement scores, the post-survey included
two closed-ended questions that evaluated the nurses’ endorsement of the interventions. Nurses
were asked to select “yes” or “no” in response to the questions, “Do you feel it would be
beneficial to have a “team temperature check” during your shift?” and, “Do you feel it would be
beneficial to have access to a Mental Health Champion on shift to assist your mental health
needs and provide mental health resources when needed?” These questions were followed by
two Likert-scale questions, which asked, “How likely are you to utilize a “team temperature check” during your huddles?” and, “How likely are you to utilize a Mental Health Champion?” (Appendix J).

**Section IV. Results**

The pre-survey received a total of 13 responses from all clinic nurses. The contributing reasons for nursing burnout were identified as shift workload, unsafe staffing, high-stress environment, and emotional strain. When the pre-survey respondents were asked, “Have you considered transferring or leaving the profession of nursing as a result of nursing burnout?” one nurse reported “yes, leaving the profession,” and five responded, “yes, transferring within the profession.” This question included an open-text response box for the respondents who selected "yes, transferring within the profession" as their answer; their responses included travel nursing, indirect patient care, and home health. Another pre-survey question with an open-text response box asked, “How can management help decrease your burnout/what would be beneficial to you?” Several nurses suggested increased staffing. One nurse responded, "Provide food stipend, financial incentives, or actively promote mental health counseling for staff."

The post-survey received a total of five responses; three responses came from Clinic A nurses, and two were from Clinic B nurses. The project anticipated a 15% reduction of perceived burnout for each of the five CBI burnout questions. The following data exhibits the CBI results of (a) the pre-survey given to all ambulatory clinic nurses, (b) the post-survey given to the intervention group at Clinic A, and (c) the post-survey given to the control group at Clinic B, respectively:

1. Do you feel burnout because of your workload?
   a. Pre-survey (all clinic nurses): 65.4%
b. Post-survey for the intervention group (Clinic A): 50%
c. Post-survey for the control group (Clinic B): 12.5%

2. Are you exhausted in the morning at the thought of another day at work?
   a. Pre-survey (all clinic nurses): 63.5%
   b. Post-survey for the intervention group (Clinic A): 41.7%
   c. Post-survey for the control group (Clinic B): 62.5%

3. Is your work emotionally and/or physically exhausting?
   a. Pre-survey (all clinic nurses): 73%
   b. Post-survey for the intervention group (Clinic A): 33.3%
   c. Post-survey for the control group (Clinic B): 25%

4. Do you have enough energy for your family and friends during non-working hours?
   a. Pre-survey (all clinic nurses): 46.2%
   b. Post-survey for the intervention group (Clinic A): 58.3%
   c. Post-survey for the control group (Clinic B): 50%

5. Do you find it hard to work with your patients?
   a. Pre-survey (all clinic nurses): 44.2%
   b. Post-survey for the intervention group (Clinic A): 33.3%
   c. Post-survey for the control group (Clinic B): 37.5%

Clinic A nurses exhibited more than a 15% reduction in perceived burnout within three of the five CBI questions. Work-related burnout questions #1 and #2 exhibited more than a 15% reduction; personal burnout question #3 also displayed more than a 15% reduction. Overall, the pilot program reduced perceived burnout among nurses at both clinics, except for the work-related burnout question in #4. Specifically, nurses at Clinic A exhibited an increase in
perceived work-related burnout of 12.1% when asked, “Do you have enough energy for your family and friends during non-working hours?” The pre- and post-survey scores were collated into a bar graph to visually display the intervention outcomes for the project group’s poster board presentation (Appendix K).

The three nurses of Clinic A were in favor of the interventions: All respondents (100%) were in favor of the “team temperature check” intervention, while most respondents (66.6%) were in favor of the MHC intervention. Though the two nurses at Clinic B did not receive the intervention, all Clinic B respondents (100%) were in favor of the “team temperature check” intervention; however, half of the respondents (50%) were in favor of the MHC intervention.

The post-survey asked clinic nurses, “If you were to receive a “team temperature check,” how would you like to receive it?” Of the five respondents from Clinic A and Clinic B, three nurses requested to receive the intervention “electronically by phone.” Their responses could be attributed to the design and resources provided during the project. Nurses submitted electronic responses for the pre-survey, intervention period, and post-survey. Nurses could have grown accustomed to responding electronically using the generated QR codes that link them to the Qualtrics platform.

**Section V. Discussion**

**Summary**

The qualitative components of the pre-survey provided an opportunity for nurses to voice their sources of workplace burnout and potential solutions anonymously. The nurses primarily reported that administrators should increase staffing to address the accumulated burnout from shift workload, unsafe staffing, high-stress environment, and emotional strain. During the brainstorming process, the group project members considered this and other solutions requiring
fiscal expenditure. However, considering the organization's likelihood of adopting interventions that require direct labor costs, the project opted for cost-effective and timely interventions that can easily integrate into daily nursing practice without expense. This consideration led the project group members to implement MHCs and “team temperature checks”, which accommodated one nurse’s request to “actively promote mental health counseling for staff.”

Influenced by the Mayo Clinic’s WCP nurse champion roles (Wieneke et al., 2019), the project designed the role of MHCs to suit the organization’s identified need to address heightened mental health concerns resulting from nursing burnout. In addition to incorporating MHCs that can provide mental health expertise and offer peer-to-peer support, the pilot program included “team temperature checks” during mid-shift huddles to identify and alleviate perceived burnout scores. The “team temperature checks” served as an open-dialogue intervention to create camaraderie (Choose People, n.d.) while serving as a valuable communication tool for colleagues who may feel reluctant to speak with managers about emotional concerns (Wharton et al., 2021). The daily “team temperature checks” during mid-shift huddles emulated the concept of the CLECC program’s mid-shift cluster discussions, which aid nurses in identifying their colleagues’ needs and when additional support is needed (Bridges et al., 2018). The interventions had the primary intention to decrease measures of perceived burnout among the nursing workforce; other benefits include increased staff engagement, enhanced work culture, and improved workplace satisfaction, all of which could potentially increase the organization’s nurse retention rates.

The conduction of the pilot program resulted in favorable outcomes. Although Clinic A received the interventions, both Clinic A and Clinic B exhibited overall reductions in the asked perceived burnout questions, excluding the work-related burnout question #4. Nurses presented
more than a 15% reduction for questions #1, #2, and #3. Nurses exhibited a decline in client-related burnout in question #5 but did not exceed the anticipated 15% reduction. In addition to reducing measures of perceived burnout, nurses also endorsed the interventions. The three Clinic A nurses were all in favor of the "team temperature checks"; however, only two favored the MHC intervention. Given this analysis, it is essential to note the adaptability of the interventions. The organization can easily adapt the nurse champion role to best suit personal and organizational needs (Wieneke et al., 2019).

Limitations

The project faced several limitations that may have affected the study results, which future studies should address if researchers wish to examine the pilot program again. First, the timeline to introduce and conduct the interventions was short. MHCs were oriented and began their roles on the same day; the project could have considered utilizing time in the pre-intervention period to educate and motivate the adoption of the interventions, which would gain more buy-in from the nursing workforce. Future studies considering the implementation of the interventions should consider Kurt Lewin's three-stage change model of unfreezing, changing, and refreezing (Harris et al., 2018), particularly taking time during the unfreezing phase to advocate the need to implement change. Additionally, the pilot program occurred in one workweek; employees could have been more favorable and likely to continue using the interventions after the study if the program was prolonged. Prolongation of the pilot program would lead to the gained support of the interventions and subsequent adoption of the behaviors, which emulate the changing and refreezing phases in Lewin's theory.

The study results may be affected by nonresponse bias, exhibited by a decrease in survey responses. The repetitive nature of the surveys may have attributed to this bias. The project asked
the nurses to respond to three surveys using the same host survey platform. The project initially received 13 pre-survey responses on Qualtrics, and nurses used the survey platform again to log daily "team temperature checks." After completing the pilot program, the project asked nurses to fill out the post-survey similarly on Qualtrics, resulting in five responses. The repetitive nature of the questions may also have contributed to nonresponse bias. The pre- and post-survey included the same five questions of the CBI. Nurses may have recognized these questions and believed they had already participated in this survey or felt unwilling to participate due to its repetitive nature. The differences in duration of the pre-survey versus the post-survey may have also contributed to nonresponse bias. The pre-survey was open for roughly three weeks, while the post-survey was open for five days.

It is unsure if the cross-sectional nature of the project can determine causality. Throughout the project, the ambulatory clinics hired several travel nurses under the Emergency Medical Services Authority (ESMA) legislature to combat staff shortages and the healthcare service demands of the COVID-19 pandemic. Some travel nurses ended their contracts amid the project while new travel nurses joined the workforce. Though travel nurses were still representative of the observed nursing population, it is possible that some travel nurse respondents did not fully participate in the project's execution over the four months.

The design of the Qualtrics pre- and post-surveys could have influenced several forms of response bias. The surveyed nurses knew the project's intention of addressing nursing burnout, thus potentially leading to social response bias. Additionally, the nurses may have exhibited speed runs when completing the surveys due to survey fatigue from its repetitive nature. Lastly, the anonymous nature of the surveys could be beneficial yet simultaneously detrimental.
Anonymity allowed nurses to respond openly and honestly to the survey questions, but it became challenging to determine if the project followed the same individuals over four months.

**Recommendations for Future Research**

The pilot program successfully provided the workforce with appropriate tools to help nurses identify and alleviate burnout among their peers. However, it remains unclear if the nurses adopted the interventions into their daily nursing practice after completing the pilot program. The project encourages MHCs, the nursing workforce, and the organization to continue utilizing the interventions in daily work behaviors. The nursing workforce can also adapt the proposed interventions to serve their personal or organizational needs. If future researchers or the organization reimplement the interventions, two suggestions include a weekly check-in with an assigned MHC or weekly electronic check-in. At the beginning of the pilot program, two project group members and an appointed MHC discussed the potential of the nurse champion role. After providing the elevator pitch and staff education on the interventions, the MHC inquired about having weekly check-ins rather than daily check-ins. Though the project designed the check-ins to accommodate daily “team temperature checks” within the observed workweek, this suggestion should be considered for future research.

Future researchers or members of the organization who wish to reimplement the interventions should also consider the option of weekly electronic check-ins. Nurses easily participated in the project’s electronic pre- and post-surveys. The post-survey results also show that 60 percent of nurses prefer to receive the intervention “electronically by phone.” The organization should consider adopting similar electronic check-ins and wellness programs that other nurses practice at neighboring Bay Area hospitals. For example, a privately-owned hospital 25 miles away from the clinics encourages its employees to participate in “StandOut” electronic
check-ins; unit managers at this hospital encourage their employees to submit weekly, voluntary “StandOut” reports. The electronic check-ins ask employees to list activities they loved doing that week, activities they loathed that week, their priorities of the week, and their needs for the week. This method allows managers to observe areas where their employees may need support. Although “team temperature checks” were intended to be completed during mid-shift huddles to enable in-person peer-to-peer support, future researchers or the organization should consider conducting weekly electronic check-ins if this suggestion best suits their needs.

Although the project aimed to incorporate MHCs and "team temperature checks" to reduce perceived burnout measurement scores, healthcare administrators should still consider other viable options to reduce workplace burnout. This includes solutions requiring expenditure from the facility's direct costs, such as increasing staffing, offering compensation, or providing mental health days off. Lamont et al. (2016) performed a cross-sectional study that examined sickness absences among Australian nurses and midwives. The study asked participants how many sick days they had taken in the previous 12 months, then asked how many of the sick days they would classify as "mental health days." Their study results showed that 54% of participants reported taking "mental health days," with study participants reporting a median number of taking two "mental health days” off within the previous 12 months. Given this information and the worsening of the nursing burnout phenomena, future researchers and healthcare organizations should consider providing mental health days off to their employees. Software and technology companies have adopted this, and it is time for healthcare institutions to incorporate the same idea. Healthcare jobs and other people-oriented occupations generate high amounts of burnout among their employees; thus, providing substantial resources that support mental health and alleviate feelings of burnout among employees is greatly needed. Additionally, providing mental
Conclusion

Nursing burnout has always been an existing phenomenon, which the COVID-19 pandemic has only worsened. This health care emergency has burdened healthcare systems nationwide, leading to heightened mental health concerns, increased staff turnover rates, and the mass exodus of nurses leaving the profession. Specifically, the COVID-19 ambulatory clinic nurses have attributed their increased levels of burnout directly to the pandemic, and about half of the surveyed population are considering transferring or leaving the profession. The organization must consider the proposed solutions and additional methods to alleviate burnout and retain its nursing workforce.

In Bay Area healthcare systems alone, nurses have endured heightened feelings of burnout caused by the direct and trickle-down effects of the pandemic. Nurses are burdened by the overwhelming number of patients they are assigned to take care of or have lost, the case spikes leading to hospital surges, and the impacts of COVID-19 itself. Nurses have been chronically exposed to physical and emotional demands of the pandemic without any relief. There has been a wave of nursing strikes across Bay Area healthcare systems to improve wages, address staffing shortages, and provide mental health resources. Some strikes also aimed to protect California’s safe nurse-to-patient ratios (Nursing Service Staff, 2004), which many healthcare institutions waived due to policy relaxation during the pandemic (Cal. Exec. Order N-39-20, 2020). Some nurses at these institutions have also endured the loss of coworkers but could not access mental health resources or take mental health days off to cope.
These issues that Bay Area nurses face are similar to the longstanding issues that nurses have been facing nationwide. Nurses across the nation have been overwhelmingly experiencing burnout and job dissatisfaction caused by the pandemic, the nursing shortage, and unsafe working environments. The United States is close to reaching one million deaths from COVID-19. In addition to coping with COVID-19 patient deaths, nurses are expected to remain resilient while dealing with the magnified issues of healthcare systems without resolution. Thousands of nurses joined the “National Nurses March” in Washington D.C. in May 2022, advocating for policy change from healthcare systems and policymakers. The “National Nurses March” was intended to spread awareness of the challenges faced by the nursing profession (National Nurses March, n.d.), and nurse attendees advocated for changes to improve nursing burnout, staff shortages, and unsafe working conditions. Healthcare institutions and legislators should recognize the dire importance of this movement to retain nurses that make up a large portion of the healthcare sector.

The project urges the organization and other healthcare institutions to implement solutions that improve their employees’ mental health and well-being, thus retaining nurses in the profession they once loved. Nurses are a large body of employees responsible for taking care of patients and improving patient outcomes. Thus, it is imperative to begin implementing changes that alleviate nursing burnout, support mental health, improve well-being, and enhance the outcomes of the nursing workforce.
Section VI. References


Choose People. (n.d.). *Team temperature check: 3.5 questions to ask your employees.*
https://choosepeople.com/tips-tools/fine-to-something-real/


https://doi.org/10.3390/nursrep11040075


Lamont, S., Brunero, S., Perry, L., Duffield, C., Sibbritt, D., Gallagher, R., & Nicholls, R.


Section VII. Appendices

Appendix A: Statement of Determination

Student Project Approval: Statement of Determination

Title of Project: Addressing the Phenomena of Nursing Burnout: Seeking the Need for Mental Health Interventions to Support the Nursing Workforce

Brief Description of Project:
- Gap/Phenomena: The exacerbation of nursing burnout during the COVID-19 pandemic continues to affect the mental health and well-being of nurses. Chronic exposure to emotionally demanding situations can result in job dissatisfaction and organizational turnover among the nursing workforce.
- Aim Statement: To reduce feelings of perceived burnout among nurses by implementing a pilot program that incorporates Mental Health Champions (MHC) and mid-shift huddle temperature checks.
- PICOT: “Among the nurses assigned to Clinic A, how does implementing Mental Health Champions and “team temperature checks,” compared to no intervention among nurses at Clinic B, contribute to reducing perceived burnout in one workweek?”
  - P: Nurses at Clinic A and B
  - I: Mental health champions and “team temperature checks”
  - C: Changes in perceived burnout scores pertaining to the Copenhagen Burnout Inventory (CBI) tool
  - O: Reduction of perceived burnout
  - T: One workweek

Description: Nursing burnout has been an existing phenomenon contributing to hospital staff turnover rates and the nationwide nursing shortage, and the COVID-19 pandemic has only exacerbated this issue. Despite nurse resiliency and adaptation to repeated surges of COVID-19, nurses continue to leave the workforce at an exponential rate. The turnover rate for staff RNs in 2020 was 18.7%, an increase of 2.8% from the previous year (Nursing Solutions, Inc., 2021). There is an increased demand for nurses to fill vacancies in healthcare systems, particularly at entities designed to support the COVID-19 crisis; yet, these healthcare systems fail to implement solutions to retain the nurses they hire. We hope to identify the current factors contributing to burnout among nurses assigned to the COVID-19 ambulatory clinics at a Santa Clara County public healthcare system. With this information, we also aim to propose an array of mental health interventions to alleviate nursing burnout and improve nurse retention.

<table>
<thead>
<tr>
<th>Signature of Supervising Faculty</th>
<th>Dr. Nicole Beamanish</th>
<th>Date</th>
<th>5/11/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of Student</td>
<td></td>
<td>Date</td>
<td>4-25-2022</td>
</tr>
</tbody>
</table>
## Appendix B: John Hopkins Individual Evidence Summary Tool

<table>
<thead>
<tr>
<th>Article number</th>
<th>Author(s) (year)</th>
<th>Type of evidence</th>
<th>Population, setting, and population sample</th>
<th>Intervention</th>
<th>Findings that help answer the EBP question</th>
<th>Measure used</th>
<th>Limitations</th>
<th>Evidence level and quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ana et al. (2019)</td>
<td>Systematic review</td>
<td>29 primary institutions, each included pre- and post-intervention assessment. Participants were healthcare professionals, dentists, social workers, and police officers.</td>
<td>(1) 64% were person-directed interventions (cognitive behavioral training, feedback, counseling, adaptive skill building, communication skills training, social support, supervision, assistance, and encouraging nurses). (2) 2% were organization-directed interventions (stress management, work performance appraisal, work enrichment, job enrichment, and job evaluation). (3) 7% were a combination of both person- and organization-directed interventions.</td>
<td>Person-directed interventions reduced burnout in 6 months and combined interventions resulted in longer positive effects of &gt;12 months. Person- and organization-oriented outcomes were measured using the Maslach Burnout Inventory and the Shortened Burnout Inventory</td>
<td>Person- and organization-oriented outcomes were measured using the Maslach Burnout Inventory and the Shortened Burnout Inventory</td>
<td>Level III</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Galasso &amp; Barach (2020)</td>
<td>Expert opinion/literature review</td>
<td>None</td>
<td>Discussion of recommendations for improving professional well-being from five evidence-based frameworks.</td>
<td>Work-related burnout was the subscale with the highest average score. Individual, team, and leader, and organization-level interventions were used to measure positive psychology constructs (meaning and joy, happiness, self-compassion, resilience, and work-life balance).</td>
<td>Only 6 data sets were used between 1993 and 2007 which limited studies available elsewhere. Wide range of results due to lack of comparability. No evaluation of the quality of each study was done.</td>
<td>Level V</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Montgomery et al. (2021)</td>
<td>Qualitative study</td>
<td>928 nurses working in 10 acute care units in Alabama</td>
<td>To examine the CRI’s construct validity, (2) convergent validity, and (3) internal consistency reliability as measured by Cronbach’s alpha.</td>
<td>Cronbach’s alpha testing internal consistency reliability for the CRI domains (PS, B, and CI) were excellent: 0.91, 0.89, and 0.82 respectively. Preventive burnout interventions are emphasized by organizational (work environment), individual (personal/organizational emotional self-regulation during stressful situations), and combined strategies (interactions between occupational and individual contexts).</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Nobile et al. (2017)</td>
<td>Qualitative, cross-sectional study</td>
<td>32 nurses from a general adult inpatient department</td>
<td>Possible strategies to reduce burnout included discussion about workload and number of working hours, better wages, psychological follow-up for workers who deal with pain, suffering, and death, promotion of emotional support among coworkers, and analysis of mental health conditions related to occupational stress.</td>
<td>Possible strategies to reduce burnout included discussion about workload and number of working hours, better wages, psychological follow-up for workers who deal with pain, suffering, and death, promotion of emotional support among coworkers, and analysis of mental health conditions related to occupational stress.</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Nance et al. (2019)</td>
<td>Focus Group</td>
<td>None</td>
<td>Focus groups discussed organizational interventions, reduced job demands, increased job resources, improved clinical workflow, and provided support.</td>
<td>Focus groups discussed organizational interventions, reduced job demands, increased job resources, improved clinical workflow, and provided support.</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Whan et al. (2021)</td>
<td>Qualitative study</td>
<td>None</td>
<td>The importance of an ICU well-being champion who promotes well-being practices and self-care to protect staff well-being. The champion advocates psychological first aid and provides peer-to-peer support.</td>
<td>Nurses may be reluctant to speak openly about their stress, so a well-being champion provides an approachable support and selection of well-being measures by adapting to the evolving needs of ICU nurses. The well-being champion encourages self-reflection and to cultivate a positive work culture.</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Wilder et al. (2019)</td>
<td>Qualitative study</td>
<td>6077 employees of Mayo Clinic Health System</td>
<td>To evaluate the potential impact of a workplace well-being champion on employee and organizational measures of well-being through a biannual “All-Staff” Survey.</td>
<td>It is proposed that Mayo Clinic employees at clinics with Well-Being Champions (WBC) will exhibit more favorable employee and organizational measures compared to Mayo Clinic employees without WCPs.</td>
<td>Enterprise-wide “All-Staff Survey” that is conducted every two years, 90 questions in total.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Crabbe et al. (2017)</td>
<td>Cross-sectional study</td>
<td>1,537 nurses from nurses associations in 10 tertiary care hospitals in Australia</td>
<td>To investigate the prevalence of burnout, depression, anxiety, and stress among Australian nurses using the Copenhagen Burnout Inventory (CBI), the Depression Anxiety Stress Scale (DASS), and the Maslach Burnout Inventory (MBI).</td>
<td>Study revealed a high level of depression and burnout among nurses, and also revealed 32% of nurses reported significant symptoms of depression, anxiety, and stress according to the DASS.</td>
<td>Cross-sectional nature of the study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Bridges et al. (2018)</td>
<td>Randomized Control Trial</td>
<td>6 surgical wards (intervention vs. controls; 3 wards vs. 3 wards). Participants included patients (n=211) and nurses (n=180).</td>
<td>To assess the feasibility of implementing the Creating Learning Environments for Compromise Care (CLEEC) in acute hospital settings to evaluate its impact on patient care.</td>
<td>CLEEC included an on-going intervention called “clined discussion” which occurs during a mid-shift huddle. The open-ended discussion focused on establishing how the individual staff members are at the moment in that context and what they believe it is necessary to help and support nurses when difficulties are identified.</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Falbilar (2021)</td>
<td>Aims to review the evidence on burnout and its relationship to COVID-19</td>
<td>To evaluate the differences in nurse turnover and turnover intentions before and after the COVID-19 pandemic.</td>
<td>Turnover intention increased significantly after the COVID-19 pandemic. Post-COVID turnover intention predictors are related to satisfaction, commitment, and leadership style; however, post-COVID turnover intention predictors are related to the fear of the disease, stress, and anxiety.</td>
<td>Literature appraisal using a modified John Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool.</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table above represents a simplified version of the evidence summary tool provided by John Hopkins University. Each article is evaluated based on the PICOT question框架, and the findings are summarized to answer the question. The tool also considers the limitations and evidence level and quality of each study.
4. Use improvement science to test approaches to improving joy in work in your organization

3. Commit to a systems approach to making joy in work a shared responsibility at all levels of the organization

2. Identify unique impediments to joy in work in the local context

1. Ask staff, “What matters to you?”
Appendix D: Microsystem Assessment

COVID-19 COMMUNITY CLINICS

5 P'S
Microsystem Assessment

1. PURPOSE
   To provide COVID-19 focused resources and services such as vaccinations and testing

2. PATIENTS
   Primarily low-income, Medicare, Medicaid patients who seek interventions to combat COVID-19

3. PROFESSIONALS
   COVID-19 response nursing team i.e. RNs, LPNs/LVNs, and travel nurses

4. PROCESSES
   Daily morning huddles with peer-to-peer feedback and staff involvement in COVID-19 training interventions

5. PATTERNS
   Increased turnover rates and decreased retention rates compared to the years prior to COVID-19’s impact on the nursing shortage
Appendix E: SWOT Analysis

SWOT Analysis

**STRENGTHS**
- Organization’s mission and values
- Appropriate training and orientation to workflows
- Designated times for breaks

**OPPORTUNITIES**
- Access to employee benefits
- Opportunity to transition to other sites and roles within the entity

**WEAKNESSES**
- Workload
- Heightened levels of perceived stress among staff
- Shortage of permanent staff
- Ever-changing COVID-19 policies based on new recommendations
- Inability to grant PTO requests
- Defective leadership

**THREATS**
- COVID-19 related restrictions
- External stressors (unemployment, quarantine, school closures, child care, etc.)
- Unpredictability of the job (shift cancellations, sentinel events at the workplace e.g., fire leading to temporary clinic closure)
Appendix F: Fishbone Diagram

**FISHBONE DIAGRAM**

- **People**
  - Nurses bearing roles specific to COVID-19
  - Lack of ancillary roles at COVID-19 clinics
  - Lack of leadership
  - Reported burnout
  - Job dissatisfaction
  - Retention and turnover rates

- **Environment**
  - Multiple vaccination and testing clinics
  - Closure of sites
  - Transition of COVID-19 services to primary care
  - Increased workload
  - Understaffed
  - Changing workflow to match new recommendations
  - Nurse turnover

- **Process**
  - Onboarding and training documents
  - Electronic patient charts on Epic

- **Materials**
  - The impact of burnout affecting the mental health and well-being of COVID-19 response nurses
Appendix G: PDSA Cycle

PDSA Cycle

**PLAN**
- Observe the workflow & perform microsystem assessment
- Determine PICO and Specific Aim
- Conduct a literature review
- Create a SWOT analysis, perform CBA, and outline project timeline on a Gantt chart
- Meet with advisor; interview the clinic nurses
- Create surveys

**DO**
- Distribute pre-surveys to identify and measure burnout
- Provide elevator speech to introduce the interventions
- Assign Mental Health Champions to perform “temperature checks”
- Conduct and monitor the pilot program for a week
- Distribute post-surveys to remeasure burnout and identify endorsement of the interventions

**ACT**
- Report results to staff
- Educate staff on the study’s significance
- Promote the continuation of Mental Health Champions and “temperature checks” among staff

**STUDY**
- Evaluate pre- and post-survey data on perceived burnout levels
- Evaluate staff engagement in the intervention
- Evaluate post-survey data on endorsement of the interventions
## Appendix H: Pre-Survey Questionnaire

### What organization do you currently work for?
- [ ] Santa Clara Valley Medical Center
- [ ] Kaiser Permanente
- [ ] Other: ________________________
- [ ] Stanford
- [ ] One Medical

### What nursing license do you currently hold?
- [ ] LPN/LVN
- [ ] RN
- [ ] Other: ________________________

### What is your current level of education?
- [ ] Certificate
- [ ] ADN
- [ ] BSN
- [ ] MSN
- [ ] PhD/DNP
- [ ] Other: ________________________

### Are you currently working as a travel nurse?
- [ ] Yes
- [ ] Yes, practice under ESMA license
- [ ] No

### What is your primary nursing role?
- [ ] COVID-19 Vaccination/Clinic/Testing
- [ ] Skilled Nursing/Post Acute/Rehab
- [ ] Primary Care
- [ ] Acute Care/Floor Nurse
- [ ] APRN
- [ ] Nursing Leadership/Management
- [ ] Other: ________________________

### Do you feel burnout because of your workload?
- [ ] Always (100% of the time)
- [ ] Frequently (75% of the time)
- [ ] Sometimes (50% of the time)
- [ ] Rarely (25% of the time)
- [ ] Never (0% of the time)

### Are you exhausted in the morning at the thought of another day at work?
- [ ] Always (100% of the time)
- [ ] Frequently (75% of the time)
- [ ] Sometimes (50% of the time)
- [ ] Rarely (25% of the time)
- [ ] Never (0% of the time)

### Is your work emotionally and/or physically exhausting?
- [ ] Always (100% of the time)
- [ ] Frequently (75% of the time)
- [ ] Sometimes (50% of the time)
- [ ] Rarely (25% of the time)
- [ ] Never (0% of the time)
Do you have enough energy for your family and friends during non-working hours?

- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Do you find it hard to work with your patients?

- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Were you given training to complete the responsibilities of your job?

- Yes
- No

Do you feel there are enough resources to do your job efficiently?

- Yes
- No
- Sometimes
- Other: _____________________

What are some factors that have contributed to why you personally feel burnout? (Select all that apply)

- Workload
- Unsafe/short staffing
- Repetition
- Lack of leadership support
- Work-life balance
- Extremes of activity
- Not practicing within your full scope of practice
- Other: _____________________

Workplace dynamics
- Lack of autonomy
- Unclear job expectations
- Emotional strain
- High-stress environment
- Long hours
- COVID-19 pandemic directly related to providing patient care

When did these factors begin to contribute to your burnout?

- Pre-existed before COVID-19
- Emerged due to COVID-19
- Both

Have you considered transferring or leaving the profession of nursing as a result of burnout?

- Yes, leaving the profession
- Yes, transferring within the profession: _____________________
- No

Briefly express why you personally feel burnout in your workplace environment and the contributing factors:

How can management help decrease your burnout/what would be beneficial to you?:
Hello and thank you for taking our survey!

We are MSN Nursing Students at the University of San Francisco enrolled in a Quality Improvement Externship associated with Santa Clara Valley Medical Center. Our team is researching factors contributing to workplace burnout. We are currently gathering data from nurses actively providing patient care during the COVID-19 pandemic. Through this research, we aim to identify sources of nursing burnout contributing to employee retention rates. This survey is anonymous, confidential, and should take no more than five minutes to complete. We thank you for your participation and collaboration.

Please scan the QR code below to take our survey by April 2, 2022.
If you have any additional questions, please reach out to qiproject2022@gmail.com
Appendix I: Team Temperature Check Flyer

ATTENTION: SCVMC Downtown COVID-19 Response Nurses!

We are MSN Nursing Students at the University of San Francisco enrolled in a Quality Improvement Externship associated with SCVMC. Our team is executing a pilot project to incorporate Mental Health Champions and mid-shift huddle temperature checks.

Our concern:
Nursing burnout has been an existing phenomenon contributing to staff turnover rates and the nationwide nursing shortage, and the COVID-19 pandemic has only exacerbated this issue. Our recent research indicates that surveyed nurses are experiencing moderate-to-high rates of physical and emotional exhaustion related to their increased workload and job demands. Chronically placing nurses in these stressful environments without any intervention can negatively impact their mental health and well-being, thus contributing to nurses leaving the profession. Our primary concern is to reduce feelings of perceived stress among nurses by providing them with mental health tools to use within their workforce.

Our intervention:
Our pilot project will include two mental health tools:
(1) The integration of Mental Health Champions (MHCs), who serve as nurse advocates that can engage their colleagues to promote mental health and well-being activities. In addition, MHCs can assist with identifying signs of burnout among their colleagues.
(2) The implementation of “Team Temperature Checks,” a staff engagement tool that allows nurses to assess their colleagues’ perceived stress levels.

Our project will take place from Monday, April 4 to Friday, April 8. We will implement daily “team temperature checks” during mid-shift huddles. We will also assign a Mental Health Champion to whom you can report to.

Instructions:
Conduct a daily mid-shift huddle before lunch break. During your huddle, perform a “team temperature check” by answering the following questions listed on the infographic. After engaging with your peers during the team huddle, report your answers to your assigned Mental Health Champion or respond using the QR code.

Your participation matters and is greatly appreciated!

For any questions, please reach out to qipproject2022@gmail.com
As always, we thank you for your participation and collaboration!
# Team Temperature Check Response Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Q1: Scale (1-10)</th>
<th>Q2: What contributes to your number?</th>
<th>Q3: What could make it one point lower?</th>
<th>Q3.5: &quot;If higher or lower than the last time I asked, what has changed?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 4/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday 4/5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday 4/6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday 4/7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday 4/8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix J: Post-Survey Questionnaire

Do you feel burnout because of your workload?
- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Are you exhausted in the morning at the thought of another day at work?
- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Is your work emotionally and/or physically exhausting?
- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Do you have enough energy for your family and friends during non-working hours?
- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Do you find it hard to work with your patients?
- Always (100% of the time)
- Frequently (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)

Do you feel it would be beneficial to have a “team temperature check” during your shift?
- Yes
- No

If you were to receive a “team temperature check,” how would you like to receive it?
- On paper
- Verbally by the Mental Health Champion
- Electronically by phone
- Does not apply to me

How likely are you to utilize a “team temperature check” during your huddles?
- Extremely likely
- Likely
- Somewhat likely
- Unlikely
- Very unlikely
Do you feel it would be beneficial to have access to a Mental Health Champion on shift to assist your mental health needs and provide mental health resources when needed?

☐ Yes
☐ No

How likely are you to utilize a Mental Health Champion?

☐ Extremely likely
☐ Likely
☐ Somewhat likely
☐ Unlikely
☐ Very unlikely

---

Post-Survey Flyer

**ATTENTION: SCVMC COVID-19 Response Nurses!**

We are MSN Nursing Students at the University of San Francisco enrolled in a Quality Improvement Externship associated with SCVMC.

We would like to genuinely thank you for your time and participation in our Quality Improvement project. Through your participation, our team was able to identify sources of nursing burnout and create potential solutions to combat burnout in the workplace. To end our research, we ask you to complete one final survey. This survey is anonymous, confidential, and should take no more than five minutes to complete.

Please scan the QR code to complete our survey by April 15, 2022.

If you have any additional questions, please reach out to qiproject2022@gmail.com

As always, we thank you for your participation and collaboration!
Appendix K: Intervention Outcomes Bar Graph

Measuring Perceived Burnout using the Copenhagen Burnout Inventory Tool (CBI) among Ambulatory Clinic Nurses

- Pre-Survey: Total Avg. response
- Post-Survey: Avg. response of Clinic B - Control Group
- Post-Survey: Avg. response of Clinic A - Intervention Group

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey</th>
<th>Post-Survey (Clinic B)</th>
<th>Post-Survey (Clinic A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Do you feel burnout because of your workload?</td>
<td>70%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Q2: Are you exhausted in the morning at the thought of another day at work?</td>
<td>65%</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Q3: Is your work emotionally and/or physically exhausting?</td>
<td>80%</td>
<td>75%</td>
<td>70%</td>
</tr>
<tr>
<td>Q4: Do you have enough energy for your family and friends during non-working hours?</td>
<td>55%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Q5: Do you find it hard to work with your patients?</td>
<td>60%</td>
<td>50%</td>
<td>55%</td>
</tr>
</tbody>
</table>