
ORIGINAL ARTICLE

Improving diversity, equity, and inclusion in chiropractic education and profession: Report from three 2020-2021 summit meetings

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ABSTRACT

Objective: Racial and ethnic minority groups are underrepresented in chiropractic education and the profession, and are less likely than individuals identifying as White to have access to or use chiropractic care. Stakeholders with leadership positions in USA-based chiropractic colleges and organizations participated in 3 online diversity, equity, and inclusion (DEI) summit meetings to foster a deeper understanding of DEI, identify DEI objectives, and develop action steps and drive change. Summit I (51 attendees) comprised 3 presentations that provided background about DEI in chiropractic education and practice. Summit II (32 attendees), comprised 4 breakout sessions addressing organizational issues in DEI. Summit III (65 attendees) comprised 5 collaborative sessions focused on implementation of DEI objectives.

Methods: We use aggregate data and qualitative summaries to provide a descriptive narrative. Data sources include pre/post-summit quantitative surveys, items from open-ended questionnaires, and a spreadsheet of recommendations for increasing organizational DEI.

Results: Before attending Summit I, 48% rated their understanding of DEI issues as “moderately” or “very” high, compared with 74% afterward. Summit II participants suggested actions that should be taken by their institutions and the profession. Summit III participants stressed the need for DEI-supportive data, policies, and resources. They identified > 150 action steps to address DEI objectives. A listserv was established to facilitate ongoing institutional collaboration.

Conclusion: Summit participants recognized the importance of developing a diverse, culturally aware chiropractic workforce. The summits provided structure and support for stakeholders to effectively plan for and implement DEI in their organizations and institutions.

Key Indexing Terms: Chiropractic; Education; Professional; Cultural Diversity; Cultural Competency; Minority Health; Social Justice

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INTRODUCTION

Racial and ethnic minority groups in the United States of America experience disparities not only in health but also in healthcare.¹ Notably, people identifying as Black and Hispanic are about half as likely as those identifying as White to use chiropractic care.^{2,3} This appears not to be due primarily to cost or insurance status;⁴ the racial/ethnic discrepancy in chiropractic utilization is even more pronounced among beneficiaries of Medicare (US federal health insurance primarily serving people \geq age 65).⁵ Challenges in reaching communities that need chiropractic services may be due in large part to the historical and ongoing lack of diversity in chiropractic

education and practice.^{5,6} In the USA, minority groups are underrepresented in the health professions, including chiropractic. About 7% of chiropractic students and 2% of chiropractors are Black, compared to about 13% in the general population. Other groups also show substantial discrepancies; Native Americans 0.6% (students) and chiropractors 0.3% (chiropractors) vs. 1.1% in the general population; and Hispanics 12.6% (students) and 6.4% (chiropractors) vs. 18.1% in the general population.^{7,8}

There is a growing awareness of the value of fostering diversity, equity, and inclusion (DEI) in healthcare and health education, including chiropractic.⁹ To this end, 3 half-day online summit meetings were organized by Life Chiropractic College West to engage senior-level stakeholders¹⁰ and to support efforts by chiropractic institutions and organizations to improve DEI in chiropractic education and the profession.

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In this report we describe the summits and provide descriptive information and qualitative summaries using aggregate data obtained from those individuals directly responsible for organizing and conducting the summits. We present the outcomes from each of the summits, analyze and interpret the results, and summarize overall findings from this Chiropractic DEI Summits Initiative.

The Summits

A series of 3 Chiropractic DEI Summit Initiative online half-day meetings (Zoom Video Communications, Inc. San Jose, CA) were initiated and coordinated by Life Chiropractic College West Office of the President. The organizers attempted to include, as much as possible, all groups represented in the profession. Stakeholders¹⁰ with leadership positions in chiropractic colleges and organizations were invited to participate in the first Summit. Invitations to Summits II and III were sent to previous summit attendees. Invitees could attend themselves and/or designate others to represent their organizations. They were also encouraged to share the invitations with others with interest or experience in DEI.

The first 2 Summits took place on September 13 and October 20, 2020, and were attended by representatives from USA-based chiropractic colleges, national and regional chiropractic professional organizations, accreditation organizations, and chiropractic industry and media organizations. These meetings were facilitated by speakers with expertise in diversity, equity and inclusion (DEI), chiropractic, and organizational leadership. On June 3, 2021, attendees at a third online summit collaborated on a shared spreadsheet detailing multiple objectives and corresponding action steps for chiropractic colleges and associations to address the multifaceted issues of DEI in their respective organizations.

Each summit used a different format to explore how to increase diversity and inclusion (D&I) in chiropractic institutions, businesses, and profession and to create a space for participants to discuss sometimes difficult concepts. Summit I, *Introduction to Diversity & Inclusion*, followed a didactic format. The intent of this first Summit was to bring in leaders and senior stakeholders from throughout the profession (not including students) to explore knowledge areas for the profession to grow into and to determine who was interested in participating in the process. Participants attended 3 consecutive informational presentations (Table 1) that provided background and context of D&I issues in chiropractic education and practice. The presentations were followed by a brief

closing session and discussion of “next steps.” In *Diversity & Inclusion Summit II*, participants selected their choice of 4 interactive 40-minute breakout sessions, focusing on organizational-level topics: (1) power and privilege, (2) engagement, (3) culture, and (4) areas for improvement. The topics were chosen by the Summit committee based on comments from Summit I. Participants self-selected into the various topic-specific Zoom “breakout rooms” during the group interactive discussion session - and were able to switch between rooms. Throughout the breakout sessions, participants shared their perspective on DEI and information about DEI activities within their respective institutions or organization. The overall intent of this Summit was to “facilitate discussions that educate, inform, and develop interest in further participation and cooperation.”¹¹ Summit III, *Workshopping the DEI Organizational Plan*, was a collaborative meeting in which attendees used a shared spreadsheet to facilitate further DEI planning and action by chiropractic institutions, organizations, associations, and companies.¹¹ Participants attended 5 consecutive 40-minute sessions. Each session focused on expanding and operationalizing preliminary DEI objectives focusing on (1) Resources; (2) Students; (3) Resources; (4) Academic workforce; and (5) Institutional policy environment. These main objectives were created by the summit organizers from the feedback received from attendees in the first 2 Summits, and were sent to registrants before the third Summit in the form of a spreadsheet that they would collaborate on during the meeting. Note-takers populated the spreadsheet as subobjectives and action items were identified. The final document was provided to all participant organizations as a platform for their continuing work in DEI. After the meeting, a listserv was established to facilitate communication and continued collaboration among participants.

METHODS

Attendees in *Summit I* were surveyed before and after the meeting to “rate [their] understanding of diversity and inclusion issues” in chiropractic on a 1–5 scale. A rating of 1 indicated “little or no knowledge,” a rating of 5 indicated “expert knowledge.” The intermediate ratings were unlabeled. The organizers later characterized the responses as “low,” “moderately low,” “medium,” “moderately high,” and “high” understanding. We report these results descriptively. We also summarize participants’ responses to the open-ended question: “Please share 1 action you will take based on this Summit.” Other questions requested participants’ feedback about meeting logistics, and for suggestions for future meetings, which were used to develop

Table 1 - Summit I Didactic Presentations

Title	Topics
Leaning Into Difficult Conversations	The effects of exclusion on diverse populations, cultural competency, and palpable strategies and actions for driving change.
Diversity Within the Chiropractic Profession	Historic overview of racial healthcare and health disparities in the US, continuing inequality, and the ongoing diversity gap between the chiropractic profession and the US population.
Eliminating Unconscious Bias: The Hidden Divide	Conscious and unconscious bias and effects of unconscious bias in education and the workplace. Strategies for fostering an inclusive culture by being aware of and addressing personal and institutional biases. Introduces the Implicit Association Test (IAT). https://implicit.harvard.edu/implicit/takeatest.html

the program and format of subsequent Summits. In *Summit II*, after attending the breakout sessions, participants were asked: (A) What actions or initiatives do you think that the profession or chiropractic colleges should take based on what you learned at Summit II?; (B) Please share any actions you will take based on Summit II; (C) a request for participants' feedback that was used to develop the program and format of Summit III. To protect participants' anonymity, and minimize the risk of deductive disclosure, we report only summaries of their answers and include no direct quotes. In *Summit III*, during each of 5 sessions focusing on different DEI objectives, participants discussed and expanded pre-defined objectives and recommended action items for their implementation. The expanded objectives and action items were recorded on the spreadsheet that had previously been sent to the participants. Three authors (SB, DO, MS) separately reviewed the populated spreadsheets and recorded our initial impressions for each objective. We also used word cloud software (freeWordCloudGenerator.com, Salt Lake City Utah) to generate word clouds for each objective to identify the most frequently occurring words across the responses and to supplement our initial impression of the data. Word clouds are a form of analysis that quantifies qualitative data by counting the number of times a word appears in a transcript or document and providing a visual representation in which words' relative frequency is represented by the size of the word in the "cloud."¹² Word clouds are used to efficiently categorize qualitative materials and enable researchers to develop a sense of concepts' salience to study participants.¹²⁻¹⁵ Because the participants' action item suggestions had previously been condensed and arranged into general categories that represent the content of the various workshop sessions, word clouds, which can increase comprehensibility of this type of data,¹³ were particularly useful. We set the generator to include words that appeared >2 times in individual workshops or >3 times for the full summit and identified the most frequently occurring words within and across responses. The WordCloud Generator removes unnecessary pronouns, articles, and prepositions. We reconciled duplicate words and redundant concepts. We then used an iterative process of consensus to identify the most common threads and summarize the action items identified by the summit participants.

Ethics

The activities described in this report were reviewed by the Life Chiropractic College West institutional review board and determined to be conducted for nonresearch purposes, which

does not meet the US Department of Health and Human Services definition of "research" and is therefore not subject to Institutional Review Board oversight.¹⁶ No identifiable information about individuals was accessed for this project.

RESULTS

The participants in the 3 summits included representatives from 10 chiropractic colleges and 16 chiropractic organizations.¹¹

Summit I was attended by 51 "key leaders" and their chosen representatives from 9 colleges and 13 organizations. Among the 21 who completed the pre/post survey, 48% rated their understanding of DEI issues before the presentations as 4, "moderately high," or 5, "very high," compared with 74% afterward (Fig. 1). After the summit, participants were asked to list 1 action they personally planned to take as a result of their participation and for suggestions for future summits. Of the 20 who responded to this question, 7 said they would continue the work they were currently doing, and/or attend future summits; 7 discussed communicating or sharing information with others in their organizations; 3 said they would examine their own unconscious bias; and 3 said that they would take actions to increase diversity at their organizations or the chiropractic profession. Suggested improvements included expanding the attendee list, using pre-conference surveys to assess attendees' varying preconference awareness of DEI issues, and tailoring content to participants' expertise. One respondent suggested that organizers of future summits go easy on White male participants and others who are new to DEI, and might otherwise feel attacked.

Summit II was attended by 32 representatives from 7 colleges and 15 organizations. In response to the post-summit survey, participants suggested that institutions change their marketing and recruiting practices and revamp recruiting departments to reach new, more diverse students; offer tuition reimbursement programs for historically underrepresented students; create an Association of Chiropractic Colleges Presidents DEI subcommittee to explore common actions that increase diversity in the profession by recruiting historically underrepresented students, faculty, and staff; implement a nationwide DEI officer network; expand the conversation to others in the profession and help them gain better understanding of issues affecting historically excluded students.

Participants' planned individual actions were to continue to build DEI into annual planning; discuss issues of gender equity at an upcoming board meeting; continue to provide DEI trainings; convene focus groups of members for suggestions

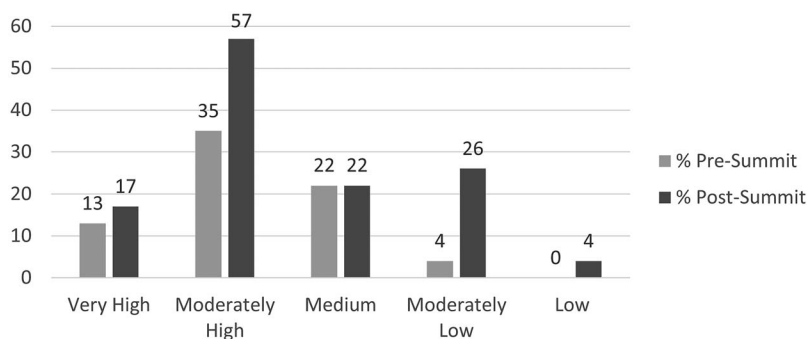


Figure 1 - Summit I participants' pre/post self-reported level of understanding of DEI.

Table 2 - Summit III DEI Session Objectives and Subobjectives

Objective	Subobjectives
Session 1: DEI RESOURCES, ALLIES, AND COMMUNITY ENGAGEMENT	1.1 Diversity Officer and Budget in place 1.2 Senior Leader as Ally 1.3 D&I Champions for Community Engagement 1.4 Engaging Allies
Session 2: DIVERSITY IN THE STUDENT BODY	2.1 Recruit underrepresented students 2.2 Scholarships for underrepresented minorities 2.3 Admissions and institutional data on under-represented minorities 2.4 Resources for retention and academic success of students from diverse backgrounds 2.5 Belonging through student experience
Session 3: DEI IN CURRICULAR AND CLINICAL RESOURCES	3.1 Enrich existing classroom curricular requirements related to DEI 3.2 Enrich existing clinical requirements related to DEI
Session 4: DEI IN FACULTY, STAFFING AND ADMINISTRATION	4.1 Hire for diversity 4.2 Institutional data for diversity, equity measures and transparency 4.3 Retention, progression, success and career advancement of faculty, staff and administration from diverse backgrounds 4.4 Training for DEI competency, awareness to support the diverse and inclusive campus experience
Workshop 5: DEI POLICY ENVIRONMENT	4.5 Representation and inclusion within Faculty & Curriculum 5.1 Policy for inclusive language on campus and in organizations 5.2 Policy for inclusive adjusting and patient exams 5.3 Policy and process on bias and harassment 5.4 Awareness of campus and organization resources, policies, and procedures to promote inclusion and equity

about increasing inclusivity in their organization; read more about DEI, White privilege, and racism; write books about the contributions of African Americans and Black history in the chiropractic profession; ensure that marketing is inclusive; and attend future diversity summits. Participants' suggestions for future summit meetings were to send out a list of discussion topics to registrants beforehand and to focus on practical action steps and how to implement them. Ideas for specific topics included broadening the discussion of DEI in more populations, cultural competency, mentoring, and increasing stakeholder engagement in the D&I conversation (not shown in tabular form).

The *Summit III* workshop was attended by 65 representatives from 13 colleges and 10 organizations. Throughout the workshop participants discussed 5 previously-provided main objectives, using the preliminary spreadsheet that they had received in advance to identify action items that chiropractic colleges and associations could use to address DEI in chiropractic education and the chiropractic profession. The participants identified 3–5 subobjectives for each main objective (Table 2) and recommended >150 action items (Appendix A, available online) to increase DEI throughout chiropractic education and in the chiropractic profession. Overall, the suggestions that emerged in Summit III were concordant with the individual predefined objective categories that emerged from Summits I & II. Participants expressed recognition that stakeholders are influenced by institutional perspective and campus culture, and that their understanding and actions may be influenced by their own cultural perspective and biases. They consistently mentioned the need for developing structures and policies and providing resources that support DEI at all levels

of chiropractic organizations. Summit III participants also emphasized the need for data to fill knowledge gaps to inform policy and practice, support training across organizations, and develop collaboration among organizations. These threads are reflected in a word cloud (Fig. 2).

Workshop Session 1: DEI Resources, Allies, and Community Engagement focused on improving diversity at all levels of organizations by collecting data and engaging diverse populations. Participants indicated that their organizations were considering or continuing action in the form of planning and early implementation, forming DEI committees, budgeting, and ensuring buy-in from senior leadership. Participants recommended action items including making financial investments to execute DEI initiatives as well as providing meaningful support and pursuing engagement from allies and partners. They recommended collecting data to measure DEI across the organization for accountability and to provide justification for ongoing financial support and resources needed to drive the DEI work. To ensure action at all levels, participants suggested training all personnel in DEI and cultural competency, and developing DEI programs. Participants discussed engaging diverse stakeholders by reaching out to diverse individuals and community groups and holding community and in-house events. Other recommendations focused on leveraging what is already in place: taking advantage of existing resources and relationships, including alumni and multilingual/multicultural practitioners from underrepresented groups and connecting with national organizations for networking and to pool resources.

Workshop Session 2: Diversity in the Student Body focused on recruiting more diverse student populations. Participants indicated that colleges need to reflect the demographics of

The 3 chiropractic virtual summits described in this report were developed iteratively as (I) didactic sessions that introduced key concepts and illustrated how diversity and inclusion needed to be addressed on personal, professional, an institutional levels; (II) interactive sessions to further delve into Summit I topics and encourage participants to share their ideas and experiences; and (III) collaborative working sessions to define and discuss objectives for achieving more diverse, inclusive, and equitable chiropractic institutions and organizations and to identify explicit action steps toward meeting those objectives. Throughout the summits, participants expressed a high level of commitment to address the concerns that were raised. In the first summit, participants initially professed to lower levels of understanding and organizational planning, but over the course of the summit meetings their understanding of D&I increased. From Summit II to Summit III equity as an explicit concept was increasingly raised by participants in the discussions around advancing DEI in chiropractic organizational policy as well as among the workforce and student population. Participants' commitment to organizational planning for change culminated in a list of action items for participants to take back to their respective organizations. The summits provided a platform for each organization to build their own strategic plans to address issues across the full spectrum of DEI and on multiple levels of organizational policies, resource allocation, culturally sensitive patient care, and diversity of students, faculty, and practitioners. Throughout, participants demonstrated high levels of participation and collaboration, and recognized the need for data to support evidence-based DEI initiatives at an organizational level. Participants expressed a strong desire to continue the process, and summit organizers contributed to establishing a listserv to facilitate communication and continued collaboration between chiropractic institutions and organizations.

While there is a role for individual chiropractors in improving diversity in their patient base,¹⁸ the profession increasingly recognizes the need for systemic change. The 2021 Chiropractic Educators Research Forum diversity conference⁹ highlighted efforts in the chiropractic profession to address DEI in the US and internationally, focusing on and addressing bias,¹⁹ recruiting and retaining underrepresented students,^{20,21} fostering faculty and practitioner diversity,^{22–24} and on supporting DEI on multiple levels within institutions.^{11,25–28} Persistent disparities, especially patterns of bias and underrepresentation of racial and ethnic minorities, have also long been recognized in graduate and professional education^{29,30} and healthcare fields other than chiropractic. For example, in medicine, these exist at all levels: students, faculty, and workforce.^{1,31,32} This has spurred efforts to increase DEI in the profession, starting with medical education.^{33,34} Similar efforts have been made in nursing and the health sciences.^{30,35–37}

Limitations

This report is based on aggregate information gleaned retrospectively from the 3 summit meetings rather than on a systematic prospectively designed investigation. Therefore, although the summits were attended by representatives of multiple colleges and organizations, they are not readily generalizable to the chiropractic educational system or to the profession as a whole. The summits were organized and facilitated by a single academic institution using a network-based strategy to invite participants at high

levels in their organizations. It is likely that organizations that were represented at the summits were already invested in improving DEI at their institutions and therefore had individuals in leadership who were interested to participate in the DEI Summits themselves and to also enjoin others from their organization to participate. We do not have demographic information about the individual summit attendees, nor information about the manner in which organizations recruited individuals to represent their organization during the various summit sessions. Therefore we are unable to speculate on the extent to which the emergent themes from the summits were directly voiced by individuals from the very minority groups that were the focus of the summits. Increasing awareness and action throughout the profession is likely to require direct engagement at broad institutional levels, using strategies that attract the attention and participation of a wide range of stakeholders.

Future Directions

A coordinated effort across chiropractic colleges should follow up with summit participants about their progress in implementing the action items from the Summit meetings and DEI activities that have been undertaken at their institutions, and to assess process outcomes (policy changes and strategic plans, etc.), summative outcomes (e.g. programmatic changes, faculty representation, student enrollment rates, etc.) and distal outcomes (graduation rates, practitioner demographics, patient demographics). Surveying institutions of higher education and national/international organizations could yield data regarding collaborations and other ongoing efforts, and produce other information needed to expand the conversation and advance DEI throughout the profession.

CONCLUSION

The DEI Summits Initiative illustrated participants' recognition of the importance of developing a diverse, culturally aware chiropractic workforce in providing patient care to a diverse population. The summits provided background and structure for stakeholders to effectively plan for more DEI, and also offered tools and mutual support for participants to implement those plans. Moreover, the summits illustrated the need for more and better data to support effective initiatives at the organizational level, as well as buy-in across the profession.

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Author Contributions

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