Improving inclusion and well-being of trans and gender nonconforming collegiate student—athletes: foundational concepts from the National Collegiate Athletic Association Summit on Gender Identity and Student—Athlete Participation

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► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi. org/10.1136/bjsports-2022-106392).

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Accepted 8 March 2023 Published Online First 20 March 2023



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To cite: Kroshus E, Ackerman KE, Brown M, et al. Br J Sports Med 2023;**57**:564–570. **ABSTRACT** The National Collegiate Athletic Association (NCAA) Summit on Gender Identity and Student-Athlete Participation was convened to identify institutional/athletic department strategies that may support the well-being of trans and gender nonconforming (TGNC) collegiate student-athletes in the USA. The Summit's purview did not include policy-level changes to eligibility rules. A modified Delphi consensus process was used to identify strategies for supporting collegiate TGNC student—athlete well-being. Key steps included an exploration phase (learning, generating ideas), and an evaluation phase (rating ideas in terms of their utility and feasibility). Summit participants (n=60) included individuals meeting at least one of the following criteria: current or former TGNC athlete, academic or healthcare professional with topical expertise, collegiate athletics stakeholder who would be involved in implementing potential strategies, representative from leading sports medicine organisation, or representative from relevant NCAA membership committee. Summit participants identified strategies in the following domains: healthcare practices (patient-centred care and culturally sensitive care); education for all stakeholders involved in athletics; and administration (inclusive language, quality improvement processes). Summit participants also proposed ways that the NCAA, through its existing committee and governance structures, could help support the well-being of TGNC athletes. NCAA-focused concepts were in the following domains: policy making processes; eligibility and transfer processes; resource development and dissemination; and visibility and support for TGNC athletes. The strategies developed represent important and relevant approaches that member institutions, athletic departments, NCAA committees, governance bodies and other stakeholders might consider in their efforts to support TGNC student-athlete well-being.

Athletes who are transgender have elevated risk of adverse mental health outcomes, ¹ consistent with patterns outside of sport. ² This is a result of stigma and discrimination at multiple levels, including individual and internalised (eg, related to identity concealment), interpersonal (eg, interactions that are discriminatory or stressful) and structural (eg, devaluing and disaffirming laws and norms). ² Stigma and discrimination are present across contexts, including sport. In a survey of 212 Spanish trans persons ages 10–62 years,

Key points

- Structural and systemic action is needed to support the well-being of trans and gender nonconforming (TGNC) collegiate student athletes, including action association-wide, by member institutions, and by institutional staff and personnel.
- ⇒ Athlete-centred and gender-affirming healthcare is an important strategy for supporting TGNC athlete well-being.
- ⇒ Role-tailored education may be beneficial for everyone involved in athletics, addressing topics including biases, myths and misperceptions about TGNC athletes.

respondents who participated in physical activity and sports reported a decline in organised sport participation after gender disclosure.³ A 2017 review of eight publications about the experiences of transgender people related to sport and physical activity suggested that many have negative experiences in organised sport settings and that lack of inclusion was a primary barrier to continued sport participation.⁴

Identifying opportunities to reduce stigma and discrimination experienced by trans and gender nonconfirming (TGNC) athletes within sport requires examining sport organisation policies and practices related to inclusion, as well as the actions of individuals (coaches, teammates and others) within sport settings.⁵ Such a multilevel environmental approach to inclusion is consistent with Ottenritter's framework for accepting and supporting sexual and gender minority individuals⁶; this framework also emphasises the importance of attending to intersectional identities (eg, race and ethnicity) and how they impact experiences of inclusion and well-being. While focused on sexual minority collegiate athletes, qualitative work conducted by Turk et al at one college in the USA underscores the influence of athletic department practices on experiences of inclusion. Collegiate athletes described how they were negatively impacted by formal and informal messaging and internalised expectations about what it means to be a collegiate athlete and to represent the athletic department and university publicly (eg, performing well athletically and



academically and not drawing attention to one's sexual orientation). Athletes also emphasised that they lacked access to resources and supports within the athletic department, such as community with similar peers, or access to athlete-centred psychological services.⁷

Sport governing bodies diverge in how they approach inclusion and well-being of gender expansive individuals. Eligibility policies are often a central focus, and discourse about who can participate in different categories of sport continues to evolve based on research and public opinion. Within collegiate sport in the USA, National Collegiate Athletic Association (NCAA) policy is moving towards sport-by-sport eligibility decisions based on the policies of the national and international governing bodies of each sport.⁸ Eligibility policies notwithstanding, there is the potential to support well-being within sport settings through sport organisation policies and practices. The NCAA Summit on Gender Identity and Student-Athlete Participation (Summit) was convened with the goal of identifying concrete and feasible steps to support well-being among TGNC student-athletes participating in collegiate athletics in the USA. The Summit purview did not include changes to sport setting eligibility policies. The purpose of this manuscript is to detail the process and results of the Summit.

METHODS

Overview

The NCAA Summit on Gender Identity and Student-Athlete Participation was held remotely on 5 October 2020-6 October 2020. The Summit was convened at the direction of the NCAA Committee on Competitive Safeguards and Medical Aspects of Sport (CSMAS). The NCAA Sport Science Institute and Office of Inclusion operationalised and implemented the Summit, with guidance to consider student-athlete participation and experiences within collegiate athletics through lenses of inclusion, well-being and fairness. We note that in literature about sport participation, the concept of fairness is contested as it is a normative concept, raising questions about what fairness means and for whom. Ultimately, a modified Delphi consensus process was used to identify useful and feasible steps that can help maximise the well-being of TGNC collegiate athletes. Summit language initially referred to transgender and non-binary student-athletes. Based on evolving guidance on inclusive language, this has been updated to refer to trans and gender nonconforming athletes.

Consensus building activities were broadly grouped into an 'exploration' phase and an 'evaluation' phase. Exploration phase activities included a combination of didactic presentations, small group discussions and opportunities for anonymous feedback. Evaluation phase activities included an asynchronous process through which Summit participants anonymously rated and provided feedback on potential strategies generated during the Summit. Participants were informed that anonymised data from the Summit would be used as part of a research study.

Participants

NCAA staff members and consultants charged with organising the Summit (EK, LD, AW, JM and BH; referred to hereafter as the internal working group) convened a steering committee composed of seven external experts to oversee Summit planning (finalising Summit goals, agenda and participants) and post-Summit activities (interpretation of anonymised Summit data and manuscript preparation). Steering committee members were purposively recruited to ensure representation by TGNC athletes and individuals with relevant academic expertise and professional experience in collegiate athletics administration.

With steering committee input, an additional 53 individuals were invited to attend the Summit, for a total of 60 participants. As with the composition of the steering committee, Summit participants included a mix of lived experiences (TGNC athletes), academic expertise (sports science, endocrinology, mental health, inclusion and sociocultural aspects of sport) and familiarity with the implementation context (collegiate athletic administration, sports medicine and coaching across different divisions of competition and institutional resource levels). Procedurally, the NCAA Sport Science Institute contacted leading scientific and medical organisations engaged in work on TGNC inclusion and asked that they identify a representative who had subject-matter expertise to attend the Summit. The NCAA Office of Inclusion contacted external TGNC advocacy organisations with whom they had worked previously and asked that they identify a representative to participate in the Summit. Snowball sampling was used to engage external TGNC advocacy organisations with whom the NCAA Office of Inclusion did not have a prior working relationship. TGNC athletes were also recruited using snowball sampling, informed by steering committee input. Representatives from relevant member committees (including NCAA Committee on CSMAS and NCAA Committee to Promote Cultural Diversity and Equity) were invited to participate in the Summit. The governance structure of the NCAA includes committees composed of rotating volunteer representatives from member institutions. These committees provide oversight of NCAA activities and establish priorities for implementation. While we sought to include a range of perspectives and lived experiences, we did not invite individuals and organisations who have advocated for the prohibition of trans studentathlete participation in collegiate sport. Racial and ethnic, geographical, education and other forms of diversity were not explicit recruitment criteria. NCAA staff members also attended the Summit in an information support capacity (eg, sharing data, providing information on current policy and serving as a resource for discussions of implementation considerations for potential actions involving the NCAA governance structures and committees). A full list of steering committee members and Summit participants is provided as online supplemental material.

Equity, diversity and inclusion statement

This study was focused on the well-being of a marginalised group of individuals (TGNC athletes), and attention was paid across all study phases to centring the voices of TGNC athletes. The steering committee and authorship group were composed of both cisgender and gender expansive individuals. TGNC athletes were represented among Summit participants and were provided with multiple avenues to safely and comfortably share their experiences, perspectives and felt needs.

Procedure

Exploration

The goal of the exploration phase was to ensure that all Summit participants had exposure to relevant scientific evidence, opportunity for increased understanding of the lived experiences of TGNC athletes, and exposure to information about implementation determinants in different collegiate athletic settings.

The steering committee identified individuals with topical expertise, who were then tasked with presenting a review of peer-reviewed literature and other relevant data on their respective topic, and addressing research gaps and limitations. Topics addressed were: (1) Historical background on NCAA practices related to the inclusion of TGNC athletes (Dr. Jean Merrill); (2)

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Overview of higher education survey data on TGNC athletes (Dr. Lydia Bell and Kelsey Gurganus); (3) Foundational medical and scientific considerations (Dr. Bradley Anawalt) and (4) Foundational social science and inclusion-related considerations (Dr. Travers).

A fifth presentation focused on the lived experiences of TGNC student-athlete Summit participants. Steering Committee members emphasised the importance of providing a safe, confidential and supportive setting for TGNC athletes to share their experiences. They raised concerns that not all of the TGNC athletes in attendance might feel comfortable sharing their experiences directly with Summit attendees during a synchronous session. Consequently, the seven TGNC athlete-participants were invited to take part in a semi-structured focus group-style meeting the day before the Summit so that aggregated and anonymous take-away points could be shared during the Summit. This pre-Summit meeting was facilitated virtually by four members of the steering committee, including cis gender and gender expansive individuals. Open-ended questions invited athletes to reflect on their positive and negative experiences as a student-athlete. Prioritising confidentiality, the meeting was not recorded, but detailed notes were taken, without any identifying information. Postmeeting, facilitators collectively identified key takeaways. These were shared back with the athletes who participated in the meeting to ensure accuracy and acceptability. Based on this process, takeaways shared during the Summit session included: (1) the roles that sport and athlete identity play in their wellbeing, (2) feelings of isolation and desire for more support and community among individuals with similar experiences, (3) hard decisions about whether to prioritise athlete identity (eg, rule adherence for competitive eligibility) or their authentic gender identity, (4) negative mental health impacts of being 'personally and viciously' targeted on social media and in traditional media, and (5) stress and uncertainty related to logistical procedures within athletic spaces (eg, use of chosen names, access to locker rooms). At the Summit, these key takeaways were presented by a member of the steering committee who helped facilitate the focus group (CM). TGNC athletes in attendance at the Summit were invited to share additional reflections.

At the conclusion of these presentations, participants were randomly placed into six-person breakout groups. In these groups, participants were encouraged to reflect on current NCAA policies and practices from the perspectives of inclusion and well-being, ask questions of group members with different roles and backgrounds, and generate ideas about potential directions to improve TGNC inclusion and well-being. At the conclusion of small group discussions, each group reported back to the broader group with key takeaways from their discussion; they were subsequently asked to share anonymised discussion notes with the internal working group.

At the conclusion of Summit activities, participants were emailed a link to an anonymous online open-ended feedback form and invited to share any additional suggestions or thoughts they had about improving the well-being and inclusion of TGNC athletes. Post-Summit, small group discussion notes and anonymous open-ended suggestions were reviewed by the internal working group to identify common suggestions and implementation considerations (eg, barriers, limitations), which were used to generate preliminary strategies. These were worded as statements reflecting actionable concepts or activities (ie, that would be taken by an institution or NCAA). Both utility and feasibility were considered when generating statements. Documentation (group notes and open-ended suggestions) were available for steering committee review to help ensure no important

suggestions were missed, and that preliminary strategies reflected Summit documentation about potentially useful strategies and implementation considerations.

Evaluation phase

The goal of the evaluation phase was to aggregate Summit participant feedback on strategies emergent from the Summit in a way that was inclusive and systematic. A web-based survey hosted on the Qualtrics platform was populated with the preliminary strategies generated in the exploration phase. Each statement related to strategies for member institutions was accompanied by scales for rating its utility and feasibility. Utility was defined as whether, if implemented with fidelity, it would positively impact student-athlete well-being. Feasibility was defined as how possible it would be for it to be implemented by member institutions. NCAA-focused statements were only rated on utility, given governance-related feasibility factors that were outside of the purview/expertise of some of the stakeholders involved in the consensus process. Response options for each dimension were on a 1-9 scale, where higher scores indicated the strategy was more useful/feasible. When participants rated a statement 6 or lower, they were asked to provide open-ended written feedback about their rationale in a text box that followed the strategy and ratings. Summit participants were emailed a link to access the survey, along with a reminder that they were participating in a research study, and that the data being collected was anonymous. NCAA staff members who were present at the Summit (ie, in a support capacity) and/or who were part of the internal working group that helped facilitate the Summit did not rate strategies.

For each proposed strategy, utility and feasibility summary statistics were calculated. Modelled on prior similar consensus processes, ¹⁰ 11 utility and feasibility means >7.00 were established a priori as thresholds for agreement that the strategy was adequately useful/feasible. The distribution of responses was also inspected by calculating the percentage of statements with a score of >7.00, with a target of 75% or more respondents scoring the statement seven or greater. For statements not reaching these thresholds, the internal working group reviewed the open-ended participant feedback to identify emergent reasons for lack of consensus utility or feasibility. Where possible, statements were modified based on this feedback. Modified statements, along with the results of the first round of ratings, were sent back to Summit participants. They were asked to follow the same rating and open-ended feedback as before on this limited subset of revised statements. Statements reaching consensus thresholds at the end of these two rounds of review were included in the final set of strategies for consideration.

Patient and public involvement

TGNC student-athletes and other stakeholders involved in college athletics were involved in all aspects of the consensus process—including establishing the focus of the Summit, identifying problems to address in the exploration phase, rating consensus statements in the evaluation phase, and contributing to manuscript preparation. We note that efforts to aggregate TGNC athlete perspectives in a safe and confidential manner pre-Summit to share with other attendees during the Summit was a key strategy for centring TGNC student-athlete perspectives in Summit activities.

RESULTS AND DISCUSSION

Summit participant feedback generated potential strategies for both NCAA member institutions (ie, collegiate athletic

departments), and for the NCAA (ie, as an association acting through its relevant member-based governance groups and committees). Strategies for member institutions were broadly grouped into three categories: healthcare, education and administrative practices. In total, the exploration phase generated 34 preliminary strategies, focused on 2 actors: NCAA institutions (n=17) and the NCAA (n=17).

Thirty-four of the 60 Summit participants rated the first round of statements. All statements reflecting strategies for member institutions met a priori consensus thresholds for utility (ie, mean scores >7.00), and 14 of the 17 met thresholds for feasibility. Statements and scores for each round of rating are provided as online supplemental document. Those not meeting thresholds for feasibility included 'Provide patient-centred healthcare for trans and gender nonconforming (TGNC) student-athletes'; 'Provide student-athletes with the option of gender-neutral uniforms' and 'Establish institutional practices that ensure availability of gender safe facilities (eg, locker rooms, restrooms) for home and visiting teams.' Feasibility concerns related to patientcentred healthcare were primarily about potential differences in institutional values (eg, schools with religious affiliations), cost of implementation, and access to appropriate training for healthcare providers. According to one Summit participant: 'It won't be easy or inexpensive, but very worthwhile—however, this should be available to ALL students!' Feasibility concerns about gender-neutral uniforms were largely related to resources (eg, cost and time demands), with several Summit participants also noting that feasibility would likely vary by sport. According to one Summit participant: 'That would have made me feel comfortable, but not sure how feasible it is with budgets'. Cost and existing building footprints were identified as barriers to gender safe facilities. According to one respondent 'At my old university we did not even have bathrooms or locker rooms designated to the female track athletes, let alone gender-neutral ones'.

Revisions were made to reflect these feasibility concerns, emphasising the elective nature of the strategies, and the potential for flexible implementation. Revised statements were: 'Encourage and incentivise healthcare providers who work with student—athletes to participate in ongoing continuing education about patient-centred healthcare, and to apply these practices to the care of all student—athletes, including TGNC student—athletes. Note that key elements of patient-centred care include understanding and respecting student—athlete identity, goals and values, and having this guide a collaborative decision-making process'; 'Where possible, provide student—athletes with the option of gender-neutral uniforms based on NCAA sport specific rules'; and 'Establish institutional practices that provide safety and privacy in facilities (eg, locker rooms, restrooms) for home and visiting teams'.

The utility and feasibility of these three modified statements were rated by 33 Summit participants in a second round of asynchronous and anonymous web-based ratings. All met thresholds for utility, and 2 were marginally below thresholds for feasibility, resulting in 15 final strategies for institutions. The two modified statements not included in the final set of potential strategies were those related to uniforms and gender-safe facilities. Participants emphasised that these would be useful strategies in terms of benefiting TGNC athlete inclusion and well-being, but continued to question whether they would be feasible at the present time across all NCAA member institutions.

All 12 NCAA-focused statements met consensus thresholds for utility. Item-specific scores across rounds of ratings are provided as online supplemental material.

Final strategies for consideration by NCAA member institutions

Institution-focused strategies meeting thresholds for utility and feasibility after two rounds of ratings were in the following domains: healthcare practices, education and administration (table 1) and are discussed below, with key points emphasized in figure 1.

Healthcare

- 1. Encourage and incentivise healthcare providers who work with student-athletes to participate in ongoing continuing education about patient-centred healthcare, and to apply these practices to the care of all student-athletes, including TGNC student-athletes. Note that key elements of patient-centred care include understanding and respecting student-athlete identity, goals and values, and having this guide a collaborative decision-making process.
- 2. Identify at least one licensed mental health provider who is able to provide culturally sensitive care to TGNC athletes.
- 3. Share with student-athletes and staff a list of licensed mental health professionals within athletics, campus partners or the greater community who are able to provide culturally sensitive care to TGNC student-athletes.

Gender-affirming interactions with healthcare providers play an important role in feelings of inclusion in sports medicine and other healthcare settings. 12 13 Prior qualitative research suggests that there are opportunities for improved interactions between TGNC athletes and clinicians in sport settings. 14 15 Both cultural competence of the clinician, and their orientation towards patient-centred care, have a potential to improve healthcare experiences for TGNC athletes. Regular continuing education training in patient-centred care for clinicians at NCAA member institutions was suggested; evidence-based approaches to such training exist. 16 Additionally, Summit participants discussed that gender identity is one of potentially many identities that are salient to any given student-athlete, meaning that an intersectional lens is relevant to patient-centred and culturally sensitive care, and in the training for clinicians about the provision of such care.

Education

- 1. Provide education specific to TGNC inclusion on a regular basis to stakeholder groups including coaches, athletic department staff, sports medicine staff and student–athletes.
- 2. Address the myths and misperceptions about TGNC athletes and various transition processes.
- 3. Address the existence and impact of explicit and implicit bi-
- 4. Emphasise shared humanity across gender identities.
- 5. Share concrete strategies for individuals to enhance TGNC inclusion (eg, inclusive communication).
- 6. Include a non-judgemental opportunity for participants to ask questions.
- 7. Tailor content for specific stakeholder roles and responsibilities (ie, coaches, athletic department staff, sports medicine staff, student–athletes).
- 8. Regularly review educational methods/modalities to confirm that primary responsibility for educating others about TGNC issues is not being placed on TGNC student–athletes.

Role-tailored education was recommended for everyone involved in athletics. Such efforts have the potential to decrease interpersonal discrimination and stigma, and to create a culture in which TGNC individuals are supported. Participants

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Table 1	Strategies that campuses may	consider to improve inclusion and/or well-being of NCAA TGNC student–athletes
Domain	Subdomain	Actions
Healthcare	Patient-centred care	1. Encourageand incentivize healthcare providers who work with student—athletes to participate in ongoing continuing education about patient-centred healthcare, and to apply these practices to the care of all student—athletes, including TGNC student—athletes. Note that key elements of patient-centred care include understanding and respecting student—athlete identity goals and values, and having this guide a collaborative decision-making process.
	Culturally sensitive care	 Identify at least one licensed mental health provider who is able to provide culturally sensitive care to TGNC athletes. Share with student—athletes and staff a list of licensed mental health professionals within athletics, campus partners or the greater community who are able to provide culturally sensitive care to TGNC student—athletes.
Education	Stakeholders	4. Provide regular education specific to TGNC inclusion for stakeholder groups including coaches, athletic department staff, sports medicine staff and student—athletes.
	Content	 Address myths and misperceptions about TGNC athletes and various transition processes. Address the existence and impact of explicit and implicit biases. Emphasise shared humanity across gender identities. Share concrete strategies for individuals to enhanceTGNC inclusion (eg, inclusive communication). Include a non-judgemental opportunity for participants to ask questions. Tailor content for specific stakeholder roles and responsibilities (ie, coaches, athletic department staff, sports medicine staff, student—athletes).
	Burden on TGNC athletes	11. Regularly review of educational methods/modalities to confirm that primary responsibility for educating others about TGNC issues is not being placed on TGNC student–athletes.
Administrati	on Inclusive language	 12. Establish institutional processes for student—athletes to select and update their pronouns. 13. Communicate expectations that staff and others will openly demonstrate use and support of selected pronouns in communications and record keeping. 14. Establish institutional protocols that support awareness and appropriate use of student—athlete and staff pronouns by PA announcers/media broadcasters.
	Quality improvement	15. Engage in regular quality improvement processes, guided by collection of feedback from TGNC student—athletes about TGNC resource availability, utilisation, barriers to utilisation and unmet needs.
NCAA, Nation	nal Collegiate Athletic Association; To	GNC, trans and gender non-conforming.

discussed the relevance of educational content related to myths and misperceptions about TGNC athletes and various transition processes, and the existence and impact of explicit and implicit biases. Prior research in selected subpopulations highlights the need for such efforts. For example, in the sport of soccer, gender identity-related knowledge gaps have been documented among coaches and team medical staff. However, research in other domains has emphasised that educational approaches focused only on increasing knowledge without addressing attitudes and providing support for action typically have limited effect. To that end, several strategies addressed aspects of action-oriented education, including sharing concrete strategies for enhancing inclusion and tailoring content and strategies to specific stakeholder roles.

Administration

1. Establish institutional processes for student–athletes to select and update their pronouns.

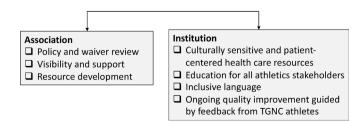


Figure 1 Overview of institution and association-level approaches to improving the inclusion and/or well-being of NCAA trans and gender nonconforming (TGNC) student athletes. NCAA, National Collegiate Athletic Association.

- 2. Communicate expectations that staff and others will openly and correctly use and support the use of student–athlete and staff pronouns in communications and record keeping.
- 3. Establish institutional protocols that support awareness and appropriate use of student–athlete and staff pronouns by public address announcers/media broadcasters.
- 4. Engage in regular quality improvement processes, guided by collection of feedback from TGNC student–athletes about TGNC resource availability, utilisation, barriers to utilisation and unmet needs.

Language is foundational for identity construction, ¹⁹ and research focused on TGNC youth in the USA has demonstrated that consistent use of gender-affirming language (ie, use of pronouns that align with gender identity, and use of individual's chosen name) can positively impact mental health.²⁰ Identifying and addressing ways that language is systematically embedded into institutional communication practices (eg, record keeping) can extend across settings, and includes use of chosen names and pronouns in medical and other record keeping (a practice identified as preferred in a study of TGNC youth).²¹ Pronounrelated concepts were also proposed for consideration by NCAA committees and governance channels. This included supporting implementation in spaces that they oversee, such as national championship competition. We note that NCAA Division III has implemented use of inclusive language in all committee and governance channel activities and programming, and provides resources to help Division III institutions adopt similar practices in their campus settings.²²

Other administrative/organisational quality improvement efforts were also suggested. Research supports the identification and use of quality improvement models and resources to aid such efforts. One common research-supported approach

Table 2 Concepts that the NCAA (through its committee and governance groups) may consider to improve inclusion and/or well-being of NCAA TGNC student—athletes

Domain	Actions
Policy review	1. Regular review of NCAA TGNC policies and materials, and relevant research specific to TGNC participation in sport, by applicable NCAA committees and subcommittees for purposes of recommending updates that uphold NCAA core values around student—athlete inclusion, well-being and fairness. 2. Identification of a multidisciplinary group of experts comprising, among others, student—athletes, industry experts, physicians and licensed mental health professionals with experience related to TGNC student—athlete support that may serve as an advisory body to NCAA governance groups, as they review association policies, materials and requests for input on TGNC topics and issues. 3. Consideration of competitive equity in women's sport as part of all policy reviews and updates. 4. Acknowledgement of gender identities that are neither male nor female (eg, non-binary, non-conforming, genderqueer) in policies and practices related to TGNC athletes.
Waivers	5. Inclusion of TGNC concerns as part of the mitigation that may qualify a student—athlete for relief of NCAA eligibility restrictions (eg, transfer, uniforms).6. Inclusion of gender transition as part of the mitigation that may support a medical hardship waiver request and additional eligibility.
Visibility and support	7. Identification and promotion of opportunities designed to enhance peer support among TGNC student—athletes across campuses. 8. Identification and promotion of opportunities designed to increase positive visibility of TGNC student—athletes.
Resource development and dissemination	9. Membership 'tool kit' and/or 'checklist' that provides athletics department personnel with relevant guidance, strategies and/or best practices related to supporting TGNC student—athlete well-being. 10. Regular updates to and adequate membership access to the 'tool kit' and/or checklist. 11. Availability of TGNC inclusion resources to support institutions in their outreach efforts to various stakeholders about TGNC inclusion (eg, to media, parents, high schools). 12. Inclusion of guidance, strategies and/or best practices related to TGNC inclusion as part of championship event procedures and materials (eg, use of preferred names/pronouns, gender safe facilities).

to quality improvement is the 'plan-do-study-act' cycle.²³ This rapid, iterative approach includes specifying a problem to address, collecting data about what happened, and then planning next steps based on what was found. Toolkits and other resources have been developed to help with issue- and setting-specific implementation of plan-do-study-act cycles.²³ Use of such evidence-based strategies can help member institutions put recommendations related to quality improvement into practice.

Strategies for consideration by NCAA committee and governance groups

Final strategies for consideration by NCAA committees and other governance groups were in the following domains: policy processes, eligibility and transfer processes, resource development and dissemination, and visibility and support (table 2). As a member-driven organisation, the NCAA uses its Board of Governors (a rotating group of representatives from member institutions, such as university presidents) and relevant NCAA committees and governance channels to evaluate, approve and implement policy and legislative change. Concepts emergent from this process might inform their planning, prioritisation, decision making and recommendations for resource allocation.

Limitations

There is very little original peer-reviewed literature related to the experiences of TGNC collegiate student-athletes, or athletes of any age across any sport setting. Consensus processes can help identify possible ways forward when literature in a given area is not robust or definitive, but such processes are necessarily constrained by the information available and the potential for participant subjectivity. As more research is conducted on the experiences of TGNC collegiate student-athletes, the present strategies should be revisited. The present work may have been strengthened if we have examined literature pertaining to a broader population (eg, including all gender expansive

and sexual minority individuals²⁴ and in broader settings (eg, academic environments).²⁵

The Pre-Summit focus group-style meeting with TGNC student-athletes was not conducted using rigorous qualitative methods; it was held primarily to enhance patient and public engagement, providing a safe, comfortable and confidential means for TGNC athletes to share their perspectives and experiences with others attending the Summit. Steering committee members used a pragmatic and stakeholder-engaged approach to aggregate key themes from this pre-Summit meeting. Formal qualitative research methods were not employed, and thus key takeaways must be interpreted with caution. Finally, not all Summit participants chose to rate strategies during the survey component of the exploration phase. Future consensus efforts using this anonymous survey methodology may benefit from improved participant incentivisation (eg, financial compensation) to achieve a higher response rate.

CONCLUSIONS

Summit outcomes emphasise the importance of considering structural and systemic approaches to improving inclusion and well-being of TGNC collegiate student-athletes, with the potential for advancements occurring at multiple levels: associationwide, within member institutions, and by institutional staff and personnel. Notwithstanding the importance of eligibility policies, member institutions can play a critical role in implementing practices that support inclusion and well-being across gender identities. While the present consensus process focused narrowly on the NCAA and member institutions, other sport governing bodies and sport-sponsoring organisations may find this process, and its results, informative as they seek to promote inclusion and well-being in their settings, in consideration of their own resources, priorities, values, governance channels and organisational structures. As strategies generated during the Summit are implemented—within and outside of collegiate

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athletics—research is needed to assess their impact on TGNC athletes' well-being. Although Summit participants considered certain proposed strategies to be feasible across NCAA member institutions, further research is needed to understand adoption and implementation, and to identify barriers and areas where further support is needed.

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Acknowledgements We thank Stephanie Chu, Jeremy Henrichs, Chris Mosier and all other members of the Steering Committee, as well as all participants in the NCAA Summit on Gender Identity and Student—Athlete Participation and in particular the student—athletes who shared their lived experiences to help guide Summit activities (see Appendix for list of Summit participants).

Contributors All authors have made substantial contributions to either conception and design or analysis and interpretation of data, drafting or revision of the article, and have seen and given final approval of the submission.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests KEA is a member of the World Rowing Gender Advisory Panel and the US Rowing Gender Identity Policy Working Group. EK is a paid consultant of the NCAA.

Patient consent for publication Not applicable.

Ethics approval This study was approved by the University of Washington's Institutional Review Board (STUDY00011065).

Provenance and peer review Not commissioned; externally peer reviewed.

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REFERENCES

- 1 Tagg B. Transgender netballers: ethical issues and lived realities. Sociol Sport J 2012;29:151–67.
- 2 Hatzenbuehler ML, Pachankis JE. Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: research evidence and clinical implications. *Pediatr Clin North Am* 2016;63:985–97.
- 3 López-Cañada E, Devís-Devís J, Valencia-Peris A, et al. Physical activity and sport in trans persons before and after gender disclosure: prevalence, frequency, and type of activities. J Phys Act Health 2020;17:650–6.

- 4 Jones BA, Arcelus J, Bouman WP, et al. Sport and transgender people: a systematic review of the literature relating to sport participation and competitive sport policies. Sports Med 2017;47:701–16.
- 5 Nelson L, Potrac P, Gale L, et al. It is not a checking off of boxes: creating LGBTQ inclusive spaces and policies in community sport. Routledge, 2021: 97–111.
- 6 Ottenritter N. Crafting a caring and inclusive environment for LGBTQ community college students, faculty, and staff. *Community College Journal of Research and Practice* 2012;36:531–8.
- 7 Turk M, Stokowski S, Dittmore S. "Don't be open or tell anyone": inclusion of sexual minority college athletes. *J Issues Intercoll Athl* 2019.
- 8 NCAA.org. Transgender student-athlete participation policy. Available: www.ncaa. org/sports/2022/1/27/transgender-participation-policy.aspx [Accessed 19 Jan 2023].
- 9 PFLAG. LGBTQ+ glossary. Available: https://pflag.org/glossary/ [Accessed 31 Jan 2023].
- 10 Kroshus E, Cameron KL, Coatsworth JD, et al. Improving concussion education: consensus from the NCAA-department of defense mind matters research & education grand challenge. Br J Sports Med 2020;54:1314–20.
- 11 Kroshus E, Wagner J, Wyrick D, et al. Wake up call for collegiate athlete sleep: narrative review and consensus recommendations from the NCAA interassociation Task force on sleep and wellness. Br J Sports Med 2019;53:731–6.
- 12 Call DC, Challa M, Telingator CJ. Providing affirmative care to transgender and gender diverse youth: disparities, interventions, and outcomes. *Curr Psychiatry Rep* 2021:23:33.
- 13 DeFoor MT, Stepleman LM, Mann PC. Improving wellness for LGB collegiate student-athletes through sports medicine: a narrative review. Sports Med Open 2018:4:48.
- 14 Harper J, Lima G, Kolliari-Turner A, et al. The fluidity of gender and implications for the biology of inclusion for transgender and intersex athletes. Curr Sports Med Rep 2018:17:467–72.
- 15 Munson EE, Ensign KA. Transgender athletes' experiences with health care in the athletic training setting. *J Athl Train* 2021;56:101–11.
- 16 Institute for Healthcare Improvement. Quality improvement essentials toolkit. n.d. Available: www.ihi.org:80/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx
- 17 Sadamasu A, Yamaguchi S, Akagi R, et al. Knowledge of and experience with transgender players among soccer team staff: a cross-sectional questionnaire design. Phys Sportsmed 2022;50:244–50.
- 18 Carter ER, Onyeador IN, Lewis NA. Developing & delivering effective anti-bias training: challenges & recommendations. Behavioral Science & Policy 2020;6:57–70.
- 19 Zimman L. Transgender language reform. JLD 2017;1:84–105.
- 20 Russell ST, Pollitt AM, Li G, et al. Chosen name use is linked to reduced depressive symptoms, suicidal ideation, and suicidal behavior among transgender youth. J Adolesc Health 2018;63:503–5.
- 21 Sequeira GM, Kidd K, Coulter RWS, et al. Affirming transgender youths' names and pronouns in the electronic medical record. *JAMA Pediatr* 2020;174:501–3.
- 22 NCAA division III LGBTQ nondiscrimination policy guide. 2018. Available: https:// ncaaorg.s3.amazonaws.com/inclusion/d3/oneteam/D3Inc_LGBTQPolicyGuide.pdf
- 23 Langley GJ, Moen RD, Nolan KM, et al. The improvement guide: a practical approach to enhancing organizational performance. John Wiley & Sons, 2009.
- 24 Storr R, O'Sullivan G, Spaaij R, et al. Support for LGBT diversity and inclusion in sport: a mixed methods study of australian cricket. Sport Manag Rev 2022;25:723–47.
- 25 Russell ST, Bishop MD, Saba VC, et al. Promoting school safety for LGBTQ and all students. Policy Insights Behav Brain Sci 2021;8:160–6.