

**Supplemental Digital Appendix 1**  
**Codebook, Developed from the Social Mission Metrics National Self-Assessment Survey,<sup>3</sup>**  
**Used in a Review of Social Mission Content in Accreditation Standards, 2016-2020**

Area	Indicator	Description
Area 1: Curriculum	Clinical experiences with underserved population	Clinical rotations or courses where students interact with patients from underserved communities
	Social mission in curriculum	Curriculum includes social mission
	Health disparities in curriculum	Curriculum includes health disparities
	Interprofessional education in curriculum	Interprofessional education for students
	Setting of IPE	Interprofessional education in clinical settings, classroom/simulation settings, or both
	LGBTQ health in curriculum	Curriculum includes LGBTQ health
	Social determinants of health (SDOH) in curriculum	Curriculum includes SDOH
Area 2: Extracurricular Activities	Extracurricular activities	Program offers its students extracurricular activities directly related to reduction of health disparities or addressing SDOH other than student-run health clinics
	Service-learning	Program has a service-learning or volunteer hours component
	Duration or time commitment	Total time commitment for service-learning
	Participation	Student participation rate in service-learning or volunteer opportunities
Area 3: Targeted Education	Other training programs	Institution or school offers specific education programs that train students to enter the following health careers
	Community health workers	Institution or school offers training for community health workers

	Dental assistants	Institution or school offers training for dental assistants
	Dental hygienists	Institution or school offers training for dental hygienists
	Medical assistants	Institution or school offers training for medical assistants
	Nurse's aides	Institution or school offers training for nurse's aides
	Public health	Curriculum includes public health
	PH cert, degree participation	Institution or school offers a public health certification or degree and students participate
Area 4: Global Health	Partnerships with LMIC to come to your school	Partnerships with low- or middle-income countries
	Rotations in LMIC	Program offers global health rotations in low- or middle-income countries
	Duration or time commitment	Average duration of the experience
	Participation	Participation rate of students in these experiences
Area 5: School Mission	Mission statements include social mission terms	School or program's mission statement specifically mentions social mission terms or themes
	Inclusion of community of commitment	Mention of community of commitment within mission statement
	Inclusion of health equity or health disparities	Mention of health equity or health disparities within mission statement
	Inclusion of SDOH	Mention of SDOH within mission statement
	Inclusion of underserved, underrepresented,	Mention of underserved, underrepresented, or disadvantaged populations within mission statement

	disadvantaged populations	
	Strategic plan includes social mission terms	School or program's strategic plan specifically mentions social mission terms or themes
	Inclusion of community of commitment	Mention of community of commitment within strategic plan
	Inclusion of health equity or health disparities	Mention of health equity or health disparities within strategic plan
	Inclusion of SDOH	Mention of SDOH within strategic plan
	Inclusion of underserved, underrepresented, disadvantaged populations	Mention of underserved, underrepresented, or disadvantaged populations within strategic plan
Area 6: Curriculum and Community Needs	Community health needs impact on curriculum	A community health needs assessment is utilized in curriculum development
Area 7: Community Collaborations	Community feedback about the off-campus rotations, learnings	Community provides feedback to the school or program about the value and effectiveness of community-based learning
	Developed collaborations	School or program has formalized or otherwise well-developed collaborations with community organizations
	Collaborations with community colleges	Presence of collaboration with community colleges
	Collaborations with faith organizations	Presence of collaboration with faith organizations

	Collaborations with federally qualified health centers (FQHCs)	Presence of collaboration with FQHCs
	Collaborations with health department	Presence of collaboration with health department
	Collaborations with K-12 schools	Presence of collaboration with K-12 schools
	Collaborations with legal professions	Presence of collaboration with legal professions
	Collaborations with philanthropic organizations	Presence of collaboration with philanthropic organizations
	Student participation in off campus rotations, learnings	Students participate in clinics, office, or programs that are based in the local community or in the communities of commitment
	Faculty compensation for off campus rotations, learning	School or program provides compensation for time devoted by faculty or staff to clinics, office, or programs that are based in the local community or in the communities of commitment
Area 8: Student Diversity	Underrepresented minority representation	Racial and ethnic minority representation within the student body
	African American graduation	African American students' graduation rates do not differ from other students' graduation rates
	Hispanic, Latinx graduation	Hispanic/Latinx students' graduation rates do not differ from other students' graduation rates
	Collection of gender identity, sexual orientation information	School or program collects information from students on self-reported sexual orientation and/or preferred gender identity
	First generation to go to college	Students from families where neither parent finished college (first-generation college students) are represented in the degree program
	First-generation college student graduation	First-generation college student graduation rates do not differ from other students graduation rates

	Grant, fellowship dollars awarded for financial need	Scholarship and grant dollars are awarded based on financial need
	Holistic review	School's or program's admission policy includes principles of holistic review of applicants
	Students from the community of commitment	Students from the community of commitment are represented in the in the degree program
	General student diversity	Other instances of student diversity
Area 9: Faculty Diversity	Underrepresented minority faculty representation	Racial and ethnic minority representation within the faculty
	African American diversity	African American representation within the faculty
	Hispanic, Latinx diversity	Hispanic/ Latinx representation within the faculty
	Gender diversity	Gender diversity within faculty
	Men in nursing faculty	Representation of men within full-time nursing faculty
	Women in medicine, dentistry faculty	Representation of women within full-time medical or dental faculty
	Openly self-identified LGBTQ faculty	Full-time faculty team includes one or more members who openly identify themselves as members of the LGBTQ community
	General faculty diversity	Other instances of faculty diversity
Area 10: Academic Leadership Diversity	Underrepresented minority academic leader representation	Underrepresented minority representation within academic leadership
	African American diversity	African American representation within academic leadership
	Hispanic, Latinx diversity	Hispanic/ Latinx representation within academic leadership

	Gender diversity	Gender diversity within academic leadership
	Men in nursing academic leadership	Representation of men within nursing academic leadership
	Women in medicine, dentistry academic leadership	Representation of women within dental or medical academic leadership
	Academic leader identifying as LGBTQ	Academic leadership team includes any member who openly identify themselves as members of the LGBTQ community
	Academic leadership diversity	Other instances of academic leadership diversity
Area 11: Pipeline Programs	Pipeline programs for K-12 students	School or program sponsors, runs, or assists with any pipeline programs targeted to K-12 students and aimed at encouraging them to train for careers in the health professions
	K-12 pipeline students from minority groups	K-12 students in pipeline programs are from underrepresented racial/ethnic minority groups
	K-12 pipeline students in the free or reduced lunch program	K-12 students in pipeline programs are in a free or reduced lunch program
	Pipeline programs for undergrad students	School or program sponsors, runs, or assists with any pipeline programs targeted to undergraduate college students and aimed at encouraging them to train for careers in the health professions
	Undergrad pipeline student from minority groups	Undergraduate students in the pipeline programs include those are from underrepresented racial/ethnic minority groups
	Undergrad pipeline students who are first generation	Undergraduate students in the pipeline programs include those who are the first in their family to go to college
	Undergrad pipeline students that enter health professions	Undergraduate students in the pipeline program ultimately enter education for one of the health professions

Area 12: Student Training	Student training on cultural competency, humility	Students take training on cultural competency or humility
	Student training on health advocacy	Students take training on health advocacy
	Student training on unconscious, implicit bias	Students take training on unconscious or implicit bias
Area 13: Faculty Training	Faculty training on cultural competency, humility	Full-time faculty take training on cultural competency, humility
	Faculty training on health advocacy	Full-time faculty take training on health advocacy
	Faculty training on SDOH	Full-time faculty take training on SDOH
	Faculty training on unconscious, implicit bias	Full-time faculty take training on unconscious or implicit bias
Area 14: Student-run Clinics	Faculty participate in student-run clinics	Faculty or staff members actively give time to student-run health clinics
	Compensation for faculty, staff in student-run clinics	School provides compensation for time that faculty or staff devote to student-run health clinics
	Students participate in student-run clinics	Students participate in any student-run health clinics
Area 15: Student Activism	Financial support for community activities	School provides regular financial support for community-oriented student activities outside of the curriculum (not including student-run health clinics)
	Student involvement in minority professional associations, societies	Minority students are active in minority professional associations and societies
	Students involved in community programs on health disparities or SDOH	Students are actively involved in community-based programs or organizations that address health disparities or SDOH outside of student-run health clinics
	Faculty involved in advocating for health, SDOH	Faculty members are actively involved in advocating for change in issues related to health or its social determinants

Area 16: Faculty Activism		(Include regional, state, national or international advocacy organizations)
	Faculty involved in community programs on health disparities, SDOH	Faculty are actively involved in community-based programs or organizations that address health or issues related to health outside of student-run health clinics
	School recognizes, rewards faculty for community-based programs or health advocacy activities	School recognizes or rewards faculty participation in community-based programs or health advocacy activities
Area 17: Primary Care	Grads entering primary care	Graduates enter primary care
	Dental - Grads entering general practice dentistry, public health dentistry, pediatric dentistry	Graduates enter general practice dentistry, public health dentistry or pediatric dentistry
	Medicine - Grads entering residency in family practice	Graduates enter residency in family practice
	Medicine - Grads entering family medicine, general internal medicine, general pediatrics, med-peds, or general ob-gyn following residency	Graduates enter primary care practice following residency (family medicine, general internal medicine, general pediatrics, med-peds, or general ob-gyn)
	Nursing - Grads entering public health nursing, work with underserved populations	Primary degree program graduates enter public health nursing or primarily work with underserved populations
	Nursing Grad - Grads entering primary care practice, family medicine, pediatrics, preventative health	Nurse Practitioner graduates enter primary care practice (such as family medicine, pediatrics, or preventative health)



	Grads practicing in community health centers (CHCs), FQHCs	Degree program graduates practice in CHCs, including FQHCs
	Primary care promotion	School or program encourages students to enter primary care or general community-based practice
Area 18: Research Focus	Impact on community health needs assessment (CHNA) on research agenda	Development of the school's research program is explicitly informed by a CHNA or other ongoing mechanisms designed to monitor and respond to community health priorities
	Presence of research projects, community engaged research	Research includes community-engaged research
	Presence of research projects, health equity, health disparity	Research includes a focus on health equity or health disparities
	Presence of research projects, health promotion, disease prevention research	Research includes a focus on health promotion or disease prevention
	Presence of research projects, health, community needs assessment	Research includes a focus on community health needs assessment
	Presence of research projects, SDOH	Research includes a focus on SDOH
	Schools research focused on community engaged research, health equity, disparity research, health promotion, disease prevention research, SDOH, CHNA	Research on social mission, general

## Supplemental Digital Appendix 2

### Keywords Used in a Review of Social Mission Content in Accreditation Standards, 2016-2020

SMM Areas	Social Mission Terms	Keywords Identified from the Conceptual Review
Area 1: Curriculum	Interprofessional	inter-professional, <sup>1</sup> interdisciplinary health team, <sup>2</sup> multidisciplinary education, <sup>3</sup> teamwork <sup>a</sup>
	Underserved	Indigenous health, <sup>4</sup> mal-distribution <sup>5</sup> , maldistribution <sup>b</sup>
	Determinants	Social needs <sup>6</sup>
	Dispar <sup>c</sup>	-
	LGBT <sup>c</sup>	Sexual orientation <sup>b</sup>
Area 2: Extracurricular Activities	Service-learning	-
	Service learning	Health promotion <sup>7</sup>
	Volunteer	-
	Population	-
Area 3: Targeted Education	Public health	Disaster medicine <sup>8</sup>
	Health systems	Ecosystem health <sup>9</sup>
	Health system	-
Area 4: Global Health	Global health	Clinical Competence, <sup>10</sup> international electives <sup>11</sup>
Area 5: School Mission	Underrepresented	Racial bias, <sup>12</sup> Minority health <sup>13</sup>
	Disadvantaged	Allied Health, <sup>14</sup> blended learning <sup>15</sup>
	Equity	Community networks, <sup>16</sup> Community-based Interventions, <sup>16</sup> Social problems <sup>16</sup>
	Community of commitment	-
	Community of interest <sup>d</sup>	Health professions educators, <sup>17</sup> community of practice <sup>17</sup>
Area 6: Curriculum and Community Needs	Community health	-
	Legal	-

Area 7: Community Collaborations	Faith	-
	Church	Community partnerships <sup>18</sup>
	Temple	-
	Mosque	-
	Synagogue	-
	FQHC	-
	K-12	-
	K through 12	student health outcomes, <sup>19</sup> barriers <sup>20</sup>
	Community college	minority groups <sup>21</sup>
	Health department	health care access <sup>22</sup>
	Philanthrop <sup>c</sup>	-
	Charitable	-
Area 8: Student Diversity	Holistic review	-
Area 9: Faculty Diversity	Diversity	-
Area 10: Academic Leadership Diversity	Inclusive	-
Area 11: Pipeline Programs	Pipeline	Student training programs, <sup>23</sup> internship programs <sup>23</sup>
	First-generation	-
	First generation	-
Area 12: Student Training	Unconscious	-
	Implicit	Implicit association, <sup>24</sup> reflection <sup>24</sup>
	Bias	Practical reasoning <sup>25</sup>
Area 13: Faculty Training	Cultur <sup>c</sup>	-
	Humility	Multicultural curriculum, <sup>26</sup> structural competency <sup>27</sup>
	Advocacy	-
Area 14: Student-run health clinics	Student-run	Workplace based learning <sup>28</sup>
	Student run	-
	Community-based	Health promotion, human centered design <sup>29</sup>

Area 15: Student Activism		
	Community based	-
Area 16: Faculty Activism	Activism	-
Area 17: Primary Care	Primary care	Preventive medicine measure <sup>30</sup> , preventive care <sup>b</sup>
	General practice	-
	Federally qualified health center	-
	Family medicine	-
	Family practice	-
Area 18: Research Focus	Community engaged	Social accountability, <sup>31</sup> community mobilization <sup>32</sup>
	Participatory	-
	Health promotion	-
	Disease prevention	-
<b>Additional Terms not mapped to a particular area</b>		
Social Accountability		
Socioeconomic		
Ethnic		
Racism		
Race		
Disab <sup>c</sup>		
Rural		

<sup>a</sup>Not retrieved from article, but rather from the Commission for Nursing Education Accreditation (CNEA) accreditation standards document

<sup>b</sup>Not retrieved from a particular article but rather from group discussions

<sup>c</sup>Words were shortened to provide a more comprehensive text search

<sup>d</sup>Not retrieved from article, but rather from the Commission on Collegiate Nursing Education (CCNE) accreditation standards document

## References for Supplemental Digital Appendix 2

1. Miller R, Scherpbier N, van Amsterdam L, Guedes V, Pype P. Inter-professional education and primary care: EFPC position paper. *Prim Health Care Res Dev*. 2019;20:e138. doi:10.1017/s1463423619000653
2. Leary KS, Marchini L, Hartshorn J, Johnsen DC. An emulation model in critical thinking used to develop learning outcomes in inter professional practice. *Clin Exp Dent Res*. 2019;5(4):406-412. doi:10.1002/cre2.195
3. Formea CM, Nicholson WT, Vitek CR. An inter-professional approach to personalized medicine education: One institution's experience. *Per Med*. 2015;12(2):129-138. doi:10.2217/pme.14.63
4. Austin C, Berg E, Heuer L, Cushman L, Lindquist C, Ripp J. Public health and health professional education at a tribal college: A collaborative immersion program in rural North Dakota. *Rural Remote Health*. 2019;19(3):5020. doi:10.22605/RRH5020
5. Kizito S, Baingana R, Mugagga K, Akera P, Sewankambo NK. Influence of community-based education on undergraduate health professions students' decision to work in underserved areas in Uganda. *BMC Res Notes*. 2017;10(1):726. doi:10.1186/s13104-017-3064-0
6. Sisler SM, Schapiro NA, Stephan L, Mejia J, Wallace AS. Consider the root of the problem: Increasing trainee skills at assessing and addressing social determinants of health. *Transl Behav Med*. 2019;9(3):523-532. doi:10.1093/tbm/ibz046
7. Bullock KC. Development, implementation, and evaluation of a service-learning series for pharmacy students using a public health tool. *Curr Pharm Teach and Learn*. 2017;9(5):828-834. doi:10.1016/j.cptl.2017.05.015
8. Koenig KL, Schultz CH, Gould Runnerstrom M, Ogunseitan OA. Public health and disasters: An emerging translational and implementation science, not "Lessons learned". *Disaster Med Public Health Prep*. 2017;11(5):610-611. doi:10.1017/dmp.2017.11
9. Angelos J, Arens A, Johnson H, Cadriel J, Osburn B. One health in food safety and security education: A curricular framework. *Comp Immunol Microbiol Infect Dis*. 2016;44:29-33. doi:10.1016/j.cimid.2015.11.005
10. Siddharthan T, North CM, Attia EF, Christiani DC, Checkley W, West TE. Global health education in pulmonary and critical care medicine fellowships. *Ann Am Thorac Soc*. 2016;13(6):779-783. doi:10.1513/AnnalsATS.201601-028PS
11. Kaur G, Tabaie S, Brar J, Tangel V, Pryor KO. Global health education in United States anesthesiology residency programs: A survey of resident opportunities and program director attitudes. *BMC Med Educ*. 2017;17(215):1-6. doi:10.1186/s12909-017-1056-3
12. Johnson TJ, Ellison AM, Dalembert G, et al. Implicit bias in pediatric academic medicine. *J Natl Med Assoc*. 2017;109(3):156-163. doi:10.1016/j.jnma.2017.03.003
13. Estape ES, Quarshie A, Segarra B, et al. Promoting diversity in the clinical and translational research workforce. *J Natl Med Assoc*. 2018;110(6):598-605. doi:10.1016/j.jnma.2018.03.010
14. Spiers MC, Harris M. Challenges to student transition in allied health undergraduate education in the Australian rural and remote context: A synthesis of barriers and enablers. *Rural Remote Health*. 2015;15(2):3069. <https://www.ncbi.nlm.nih.gov/pubmed/25916254>
15. Tols D, Schäfer C, Raupach T, et al. An introduction to the inverted/flipped classroom model in education and advanced training in medicine and in the healthcare professions. *GMS J Med Educ*. 2016;33(3):Doc46. doi:10.3205/zma001045

16. Castillo EG, Ijadi-Maghsoodi R, Shadravan S, et al. Community interventions to promote mental health and social equity. *Curr Psychiatry Rep*. 2019;21(5):35. doi:10.1007/s11920-019-1017-0
17. Chen HC, Wamsley MA, Azzam A, Julian K, Irby DM, O'Sullivan PS. The health professions education pathway: Preparing students, residents, and fellows to become future educators. *Teach Learn Med*. 2017;29(2):216-227. doi:10.1080/10401334.2016.1230500
18. Deroose KP, Williams MV, Branch C, et al. A community-partnered approach to developing church-based interventions to reduce health disparities among African-Americans and Latinos. *J Racial and Ethn Health Disparities*. 2019;6(2):254-264. doi:10.1007/s40615-018-0520-z
19. Leroy ZC, Wallin R, Lee S. The role of school health services in addressing the needs of students with chronic health conditions. *J Sch Nurs*. 2017;33(1):64-72. doi:10.1177/1059840516678909
20. Li F, Yuan Y, Xu X, et al. Nutrition education practices of health teachers from Shanghai K-12 schools: The current status, barriers and willingness to teach. *Int J Environ Res Public Health*. 2019;17(1):86. doi:10.3390/ijerph17010086
21. Talamantes E, Jerant A, Henderson MC, et al. Community college pathways to medical school and family medicine residency training. *Ann Fam Med*. 2018;16(4):302-307. doi:10.1370/afm.2270
22. Denno DM, Hoopes AJ, Chandra-Mouli V. Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. *J Adolesc Health*. 2015;56(1 Suppl):S22-S41. doi:10.1016/j.jadohealth.2014.09.012
23. Bouye KE, McCleary KJ, Williams KB. Increasing diversity in the health professions: Reflections on student pipeline programs. *J Healthc Sci Humanit*. 2016;6(1):67-79.
24. Sukhera J, Wodzinski M, Rehman M, Gonzalez CM. The implicit association test in health professions education: A meta-narrative review. *Perspect Med Educ*. 2019;8(5):267-275. doi:10.1007/s40037-019-00533-8
25. Wieringa S, Engebretsen E, Heggen K, Greenhalgh T. Rethinking bias and truth in evidence-based health care. *J Eval Clin Pract*. 2018;24(5):930-938. doi:10.1111/jep.13010
26. Zanetti ML, Dinh A, Hunter L, Godkin MA, Ferguson W. A longitudinal study of multicultural curriculum in medical education. *Int J Med Educ*. 2014;5:37-44. doi:10.5116/ijme.52ec.d075
27. Neff J, Holmes SM, Knight KR, et al. Structural competency: Curriculum for medical students, residents, and interprofessional teams on the structural factors that produce health disparities. *MedEdPORTAL*. 2020;16:10888. doi:10.15766/mep\_2374-8265.10888
28. Schutte T, Tichelaar J, Dekker RS, et al. Motivation and competence of participants in a learner-centered student-run clinic: An exploratory pilot study. *BMC Med Educ*. 2017;17(1):23. doi:10.1186/s12909-017-0856-9
29. Adam M, McMahon SA, Prober C, Bärnighausen T. Human-centered design of video-based health education: An iterative, collaborative, community-based approach. *J Med Internet Res*. 2019;21(1):e12128. doi:10.2196/12128
30. Schor A, Bergovoy-Yellin L, Landsberger D, Kolobov T, Baron-Epel O. Multidisciplinary work promotes preventive medicine and health education in primary care: A cross-sectional survey. *Isr J Health Policy Res*. 2019;8(1):50. doi:10.1186/s13584-019-0318-4

31. Clithero A, Ross SJ, Middleton L, Reeve C, Neusy AJ. Improving community health using an outcome-oriented CQI approach to community-engaged health professions education. *Front Public Health*. 2017;5:26. doi:10.3389/fpubh.2017.00026
32. Plastino K, Quinlan J, Todd J, Tevendale HD. Stakeholder education and community mobilization garner support for sex education. *J Adolesc Health*. 2017;60(3S):S24-S29. doi:10.1016/j.jadohealth.2016.09.028