



C - CHANGE FACULTY, RESIDENT AND MEDICAL STUDENT SURVEYS

TOOLS MEASURING DIMENSIONS OF THE EXISTING CULTURE IN ORDER TO ADDRESS THE PROFESSIONAL AND PERSONAL DEVELOPMENT OF FACULTY, RESIDENTS AND STUDENTS IN ACADEMIC MEDICAL CENTERS

The National Initiative on Gender, Culture and Leadership in Medicine, known as C - Change (for culture change) housed at Brandeis University is dedicated to improving the culture of academic medicine through research and action. Our objective is to promote an inclusive, affirming, relational and energizing working environment for all medical school faculty and trainees, at the same time increasing the diversity of leadership in academic medicine.

Drawing on in-depth interviews with male and female faculty in five academic medical centers, the C - Change Faculty Survey was developed to systematically explore and document the experiences of medical school faculty and the organizational culture in their academic medical centers.^{1,2} The survey was fielded to a nationally representative sample of faculty, providing normative data to allow medical schools using the C - Change Faculty Survey to compare themselves with other similar institutions. The faculty survey has been adapted for medical students and residents to measure their perceptions of their learning environment and professionalism, and offers insights into the “hidden curriculum.” Validity evidence has been collected for all three surveys.¹⁻³

The C - Change Surveys are available for use by academic medical centers wishing to assess and improve their culture and existing practices.

Content of the C - Change Surveys

The C - Change Faculty Survey[®] assesses medical faculty perceptions of their organizational culture and professional experiences. It consists of 74 questions that assess levels of vitality, trust, professionalism, feelings of being valued and belonging, gender and diversity inclusion and equity, respect and intimidation, mentoring, and other constructs related to the organizational culture for faculty. It assesses burnout and faculty commitment to their institution, as well as intention to leave academic medicine,¹ and key demographic characteristics, e.g., age, rank, faculty roles, race/ethnicity.

The Culture of Residency Survey[®] assesses the clinical learning environment and professionalism from the perspective of resident physicians. It assesses the same dimensions as the C - Change Faculty Survey, as well as self-reported competences.²

The C - Change Medical Student Survey[®] assesses the learning environment and the development of professionalism among medical students.³ It consists of 51 questions that assess relationships, trust, feelings of being valued and belonging, ethical issues, gender and diversity equity, respect, perception of their school’s support for career development, and other constructs related to the professional development of students.

Use of the C - Change Surveys

The Surveys can be used for assessment of the culture and professional experiences, accreditation, program evaluation, quality improvement, to track the culture or special dimensions of the culture, in modular format to focus on dimensions of particular interest, or as a pre/post measurement tool.

C - Change survey data are analyzed along these important dimensions with demonstrated statistical reliability:

Dimensions of the Culture	Faculty*	Residents	Students
Vitality	✓	✓	✓
Self-Efficacy in Career Advancement	✓	✓	✓
Perceptions of Institutional Support	✓	✓	✓
Relationships, Inclusion, Trust	✓	✓	✓
Personal and Institutional Values Alignment	✓	✓	✓
Ethical and Moral Distress	✓	✓	✓
Respect	✓	✓	✓
Leadership Aspirations	✓	✓	
Gender Equity	✓	✓	✓
URMM Equity	✓	✓	✓
Work-Life Integration	✓	✓	✓
Mentoring	✓	✓	
Competencies		✓	
Perception of Institutional Change Efforts for Diversity		optional	
Perception of Institutional Change Efforts for Faculty Support		optional	
Interprofessional		optional	

*The faculty survey also assesses faculty intention to leave.

Administration of the C - Change Surveys

The C - Change Faculty Survey, the C - Change Resident Survey, and the C - Change Medical Student Survey are fielded electronically. The Faculty Survey takes about 15 minutes to complete and the Resident and Medical Student Surveys take about 10 minutes each to complete. The Surveys are hosted on a secure external website and administered by the C - Change team at Brandeis University to ensure confidentiality of responses and help achieve a high response rate. If preferred, the Medical Student Survey can be fielded in-house and/or in paper and pencil format.

Deliverables

C - Change provides a demographic profile of survey respondents, a summary report of frequencies for all items in each dimension of the culture with national norms, and data tables with item frequencies for faculty analyses of interest to the institution.

Fee Structure

Budgeting for the C - Change Surveys depends on study specifics, such as the size of the study population, analysis of sub-populations, or tailoring the survey to institutional needs.

1. Pololi, LH, Krupat E, Civian JT, Ash AS, Brennan RT. Why are a quarter of faculty considering leaving academic medicine? A study of their perceptions of institutional culture and intention to leave in 26 representative medical schools. *Acad Med.* 2012;87:859-869.
2. Pololi L, Evans A, Civian J, Shea S, Brennan R. Assessing the Culture of Residency Using the C - Change Resident Survey: Validity Evidence in 34 U.S. Residency Programs. *J Gen Intern Med.* 2017;32:783-789.
3. Pololi LH, Evans AT, Nickell L, Reboli AC, Coplit LD, Stuber ML, Vasiliou V, Civian JT, Brennan RT. Assessing the Learning Environment for Medical Students: An Evaluation of a Novel Survey Instrument in Four Medical Schools. *Academic Psychiatry.* 2017;41:354-359.

For information about use of the C - Change Surveys, please contact cchange@brandeis.edu or 781.736.8120 or Linda Pololi, MD at lpololi@brandeis.edu. Please see website at <http://cchange.brandeis.edu> for additional survey-related references and information.

