

Chapter 9

Multilevel Cultural Competence Intervention Implementation and Evaluation Framework

9.1 A Multilevel Framework for Cultural Competence in Healthcare

The seminal definition of cultural competence proposed by Cross et al. describes the need for cultural competence to be coherently integrated across the different key components of health systems to achieve maximum benefit [1]. Indeed, one of the primary factors which distinguishes cultural competence from the earlier concepts, such as cultural awareness, cultural security and cultural safety, is that it goes beyond any one dimension of healthcare systems to focus on facilitating changes in all levels of healthcare practice, including the practitioner, services, organisation and system levels [2]. This type of whole of organisation approach is reflected in the systems cultural competence interventions reviewed by the authors [3] and reported in Chap. 7 of this book. However, cultural competence interventions are most commonly delivered using a siloed approach, where interventions target one aspect of healthcare systems without explicit consideration of effects on or integration across other levels.

Achieving the kind of congruent cultural competence discussed by Cross et al., in the complex health systems that exist today, necessitates integrated, multilevel intervention approaches, approaches which affect change on individual, team, organisational and larger systems levels of healthcare systems to enable deeper more sustained changes [4]. To encourage and help develop such integrated intervention approaches, we present a multilevel framework for the design and evaluation of cultural competence interventions (see Table 9.1). This framework demonstrates how cultural competence is addressed at various levels or components of health systems through interventions targeting healthcare education, workforce development, programs and services and organisations and systems. Drawing on the results of the literature review presented in previous chapters, the framework includes the key intervention strategies, measurement tools and indicators and

Table 9.1 Multilevel cultural competence intervention implementation and evaluation framework

	Workforce development	Education and training	Services and programs	Systems and organisations
<i>Intervention strategies</i>	<p>Delivery mode:</p> <ul style="list-style-type: none"> • Professional development interventions to improve cultural competence <ul style="list-style-type: none"> – Health issue/field or practice specific training – Supervision and mentoring • Cultural competence training <ul style="list-style-type: none"> – Categorical training approaches – Cross-cultural training approaches • Delivery mode <ul style="list-style-type: none"> – Single-site – Multiple-site 	<p>Delivery mode:</p> <ul style="list-style-type: none"> • Integration of cultural competence into core or elective curriculum <ul style="list-style-type: none"> – Didactic (e.g. Lectures) – Interactive (e.g. Tutorials) – Experiential (e.g. Case scenarios) • Cultural immersion <ul style="list-style-type: none"> – Education sessions – Clinical placements – Community experience • Cultural education and training <ul style="list-style-type: none"> – Didactic – Interactive 	<p>Delivery mode:</p> <ul style="list-style-type: none"> • Community focused strategies <ul style="list-style-type: none"> – Community Participation – Community Partnerships – Community Spaces – Community Networks • Culture focused strategies <ul style="list-style-type: none"> – Values/beliefs/practices – Cultural Activities – Religion/spirituality – Interactive/visual resources • Language focused strategies <ul style="list-style-type: none"> – Full Language Adaptation – Partial Language Adaptation – Written/Audio-visual Resources 	<p>Delivery mode:</p> <ul style="list-style-type: none"> • Audit and quality improvement <ul style="list-style-type: none"> – Develop resources, tools and guidelines – Implementation of audit and monitoring • Organisation-level policies or strategies <ul style="list-style-type: none"> – Cultural protocol or policy – Workforce diversity/communication – Workforce cultural competence training – Tailored services/programs – Org. environment: support, access, resource – Advocacy for cultural, economic and social determinants – Promoted national cultural competence standards implementation – Increase quality/access/participation

<p><i>Measures and indicators</i></p>	<ul style="list-style-type: none"> • Measurement tools <ul style="list-style-type: none"> - Practitioner self-report pre-post questionnaire - Interview - Focus group - Practice site audit - Measures of research productivity • Measurement instruments <ul style="list-style-type: none"> - Patient-Reported Physician Cultural Competence (PRPCC) - Cultural Knowledge Scale (CKS) - Cultural Competency Assessment (CCA) tool - Cultural Competence Assessment Tool (CCAT) - Cultural Quotient (CQ) questionnaire • Indicators <ul style="list-style-type: none"> - Provider knowledge, attitudes, skills, behaviour and confidence - Patient satisfaction and trust 	<ul style="list-style-type: none"> • Measurement tools <ul style="list-style-type: none"> - Student learning outcomes - Reflective journal - Assignments - Exams/tests • Measurement instruments <ul style="list-style-type: none"> - Modern Racism Scale (MRS) - Attitudes Towards Indigenous Australians (ATIA) scale - Colour blind and racial attitudes scale - Transcultural self-efficacy (TSE) - Inventory for Assessing the Process of Cultural Competence – Revised (IAPCC-R) • Indicators <ul style="list-style-type: none"> - Knowledge - Attitudes - Confidence - Openness to diversity - Self-perceived cultural competence and skills 	<ul style="list-style-type: none"> • Measurement tools <ul style="list-style-type: none"> - Survey/questionnaire - Interview - Focus group - Clinical/program records • Measurement instruments <ul style="list-style-type: none"> - Client Satisfaction Inventory (CSI) - Medical Mistrust Index - Patient Hospital Satisfaction Index • Indicators <ul style="list-style-type: none"> - Medical mistrust and patient satisfaction - Program/service access/utilisation - Treatment/retention rates - Health knowledge - Health outcomes 	<ul style="list-style-type: none"> • Measurement tools <ul style="list-style-type: none"> - Audit - Interview - Focus group/client workshop - Survey/questionnaire • Measurement instruments <ul style="list-style-type: none"> - Cultural Competence Assessment Tool for Hospitals (CCATH) - Consumer Assessment of Healthcare Providers and Systems (CAHPS) - Consumer Notes Clinical Indicators (CNCI) - Adapted Organisational Readiness to Change Assessment (ORCA) • Indicators <ul style="list-style-type: none"> - Cultural sensitivity/respect/competence/responsiveness - Staff perspectives - Patient experiences and perceived barriers - Service self-report of cultural competence practices - Healthcare quality, delivery and access - Stakeholder knowledge and attitudes - Organisational readiness to change
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(continued)

Table 9.1 (continued)

<i>Intervention outcomes</i>	Workforce development	Education and training	Services and programs	Systems and organisations
<ul style="list-style-type: none"> • Provider related outcomes <ul style="list-style-type: none"> – Provider knowledge, attitudes, confidence and awareness – Provider cultural competence skills for the clinical encounter – Provider behaviour in clinical encounter • Patient-related outcomes <ul style="list-style-type: none"> – Patient satisfaction and trust – Patient assessed practitioner cultural competence – Service access, utilisation, retention and treatment adherence rates – Health outcomes 	<ul style="list-style-type: none"> • Student outcomes <ul style="list-style-type: none"> – Student knowledge, attitudes, awareness – Student perceptions and experiences – Student satisfaction – Student confidence 	<ul style="list-style-type: none"> • Intermediate healthcare outcomes <ul style="list-style-type: none"> – Patient and staff satisfaction – Service utilisation/access – Retention/adherence/treatment rates – Improved health knowledge and awareness – Improved health behaviours • Health outcomes <ul style="list-style-type: none"> – Reduction in depression severity – Improvements in quality of life – Improvements in physiological measures for cardiovascular disease and diabetes risk factors 	<ul style="list-style-type: none"> • Organisational systems <ul style="list-style-type: none"> – Improved resources/tools for providing cultural competence – Identification of needs for improvement – Healthcare outcomes • Patient/practitioner encounter <ul style="list-style-type: none"> – Cultural respect/communication – Patient/family satisfaction – Practitioner outcomes/satisfaction • National outcome <ul style="list-style-type: none"> – Informed national standards 	

outcomes to inform intervention planning, implementation and evaluation for each of these healthcare levels.

This framework offers a coherent set of strategies with related measures and outcomes. It can be used to inform cultural competence interventions for respective levels or multilevel interventions which incorporate strategies from across different levels to achieve maximum benefit towards cultural competence goals. The framework has universal application for healthcare delivery by explicating the factors important in quality healthcare for all. This is particularly the case given the current population diversity in the four CANZUS nations and continuing global migration.

We present the framework for discussion and comment on its relevance and usefulness in healthcare system contexts. To assess its utility, this framework requires testing and evaluation in practice. Application of the framework could also be improved by addressing study quality issues identified in previous chapters. This includes the assessment of behavioural outcomes in healthcare providers resulting from cultural competence education and training interventions and the evaluation of intervention impacts on healthcare and health outcomes.

9.2 Evaluating Multilevel Interventions

In complex multilevel cultural competence interventions, determining what works in what contexts and which specific intervention components have the greatest impact can be very difficult [5]. Systemic evaluation approaches can help to better understand the relationship between intervention strategies and outcomes. Different approaches to multilevel intervention evaluations were suggested [5–8], and while they exhibit some distinctions, they also share significant commonalities. All suggested evaluation approaches for multilevel interventions require mixed-method design [5–8]. Longitudinal case study approaches that explore contextual- and site-specific variables across an intervention’s lifetime are also frequently recommended [5–7]. For example, in their study, Harris et al. used a mixed-method, longitudinal case study approach including interviews, focus groups, observation of program meetings and report design questionnaires to explore synergies and catalytic interactions between a public health campaign and other levels of an intervention program, many of which were not anticipated or hypothesised in advance [5]. Nastasi and Hitchcock additionally recommend going beyond notions of program success when measuring outcomes. They suggest including aspects such as program acceptability and integrity, cultural or social validity, program sustainability and institutionalisation, along with program impact outcomes [8]. The summary table can assist program and evaluation developers to consider the types of strategies, measures and indicators that can be included to facilitate the achievement of desired outcomes.

Frequently, evaluations focus solely on intervention impacts without exploring the processes occurring in between which explain the ‘how’ of cultural competence intervention outcomes [9]. These types of ‘black box’ evaluations, where we know

the intervention strategies and outcomes [9] but cannot explain the reasons for program outcomes, affect program validity and replicability [7]. To determine causal relationships between cultural competence intervention strategies and outcomes in a way that accounts for complex community and organisational factors, we need to go beyond impact evaluations [7]. Systemic analysis helps to provide a more explicit understanding of cultural competence programs [9] by identifying the different components within a system and explicitly analysing their relationships, both to each component and the whole system [10].

One of the major benefits of multilevel cultural competence interventions is that they can increase program effectiveness through unpredictable interactions between intervention components [11]. When evaluating multilevel interventions, it is important that these dynamics are captured. Therefore, it is imperative to explore how different intervention components in complex interventions interact over time [5, 12, 13]. In particular, to understand the operation of synergistic effects ‘where the combined effect of two (or more) intervention components is greater than the sum of the two parts provided in isolation’ [5]. This requires novel approaches to intervention evaluation.

One issue in the evaluation of complex multilevel cultural competence programs is the continued reliance on linear models for mapping program relationships. These models explain relationships between program components using ‘predictable, sequential and unidirectional’ models [14]. To better capture the complex relationship between cultural competence program components and outcomes in multilevel interventions, models that depict complex system properties and relationships are crucial [14]. Causal loop diagrams, a system thinking tool for mapping complex relationships in multifaceted programs, provide a more detailed and nuanced picture of the relationships and interactions between and within different cultural competence program components [9]. Causal loop diagrams have been shown to enhance the interpretation of qualitative and quantitative data and allow for reframing of program problems and the emergence of more effective solutions than those offered by linear models [9]. Mapping the patterns and relationships between program components has the potential to more accurately reveal the different factors leading to cultural competence program outcomes. This mapping can help to avoid drawing incorrect conclusions about program cause and effect when there are many factors at play [9].

9.3 Conclusion

We drew on the trends in intervention strategies, measures and outcomes across the reviewed studies to form a preliminary framework for multilevel cultural competence interventions in healthcare. The framework presented here is designed to help guide those designing, implementing and evaluating cultural competence interventions. The framework provides a template of intervention strategies, measurement tools, indicators and outcomes which can inform interventions to improve the

capacity of healthcare systems to provide care that is responsive to differing cultural needs and contexts. This framework has the potential to increase consistency across interventions and, in doing so, can help build a stronger evidence base for the effectiveness of interventions aimed at improving the cultural competence of health systems.

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