THE DEVELOPMENT OF A NOVEL GAMIFIED CURRICULUM TO SEXUAL AND GENDER DIVERSITY IN CANCER CARE: A QUALITY IMPROVEMENT PROJECT FOR EDUCATION

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@PMChosenFamily
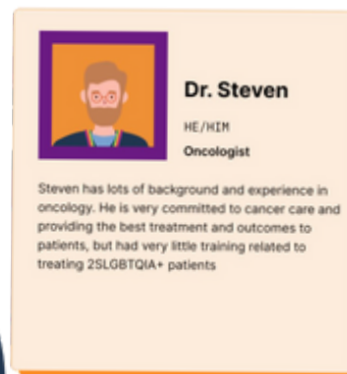Sexual and Gender Diversity in Cancer Care

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Background

The Sexual and Gender Diversity in Cancer Care (SGDc) Program at Princess Margaret Cancer Centre was established to address inequities experienced by 2SLGBTQIA+ patients and their chosen families. Sexual and gender diverse (SGD) individuals face higher distress, delayed diagnoses, and other issues related to physical, mental, sexual, and psychosocial well-being, often compounded by stigma and limited provider knowledge (Kamen C. et al., 2017). Despite increasing awareness, major gaps in inclusive communication persist. Over half of healthcare providers feel unprepared to meet SGD needs, while only 8% of oncologists report confidence in SGD-specific communication (Jivraj & Croke, 2021; Berner et al., 2020; Hunt et al., 2019; Lisy et al., 2018). In oncology settings, where care is longitudinal and involves complex treatment decisions and caregiver involvement, non-inclusive communication can have cumulative effects on trust, engagement, and continuity of care.

Real Patient-Partner Experiences

- What predominantly characterizes the interactions of SGD cancer survivors are feelings of alienation and invisibility (feeling unseen/unheard) (Kerr et al. 2021).
  - This was a predominant theme that also came up in our initial patient needs assessments where many interactions with healthcare providers (HCP) left patients "feeling like a lone fish" (lacking the feeling of real support).
- During consultations, providers often make incorrect assumptions about gender, sexual orientation, pronouns, and other experiences which generates feelings of invalidation, disrespect and dissatisfaction (Franco-Rocha et al).

Dr. Steven
HE/HIM
Oncologist
Steven has lots of background and experience in oncology. He is very committed to cancer care and providing the best treatment and outcomes to patients, but had very little training related to treating 2SLGBTQIA+ patients

Targeted education is crucial for supporting affirming, person-centred cancer care.

To address these gaps, the SGDc Program developed a virtual education module aimed at enhancing inclusive communication skills among HCPs.
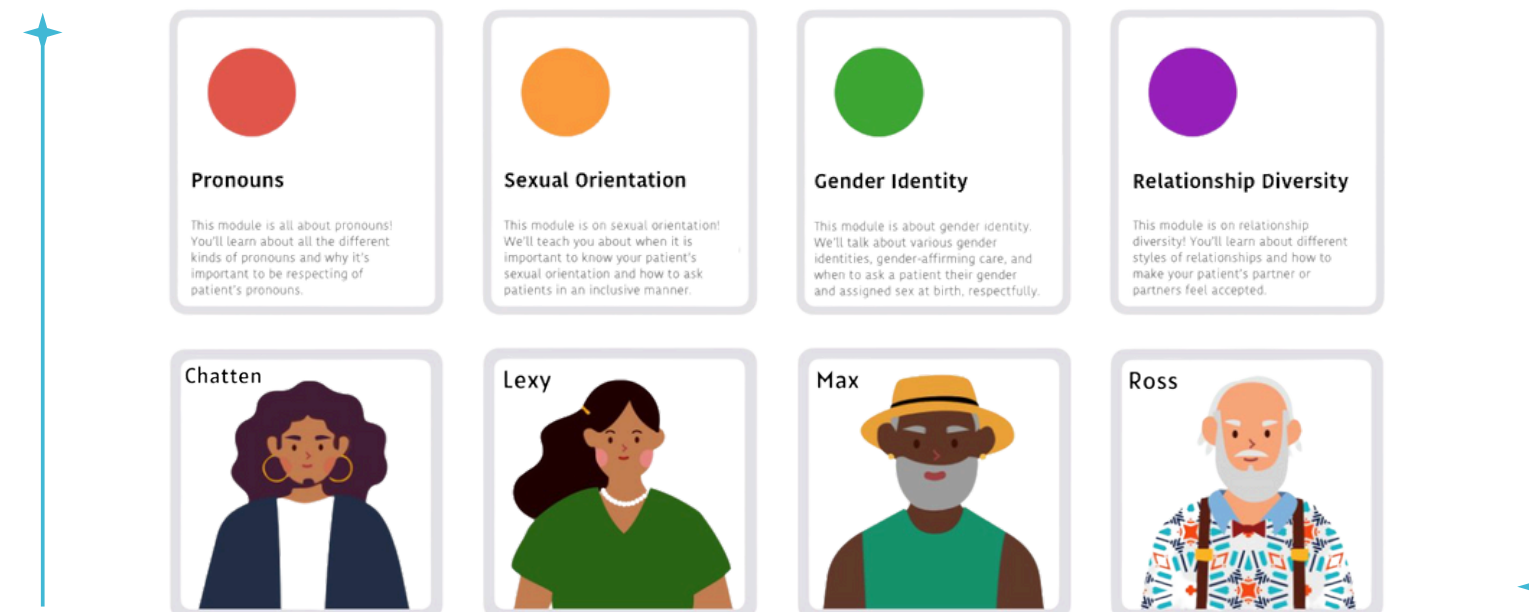
Objectives

01 Introducing HCPs to a subset of core concepts of sexual and gender diversity (e.g., pronouns, sexual orientation, gender identity, relationship diversity).

02 Teaching strategies to repair communication ruptures.

03 Providing an interactive platform to practice inclusive communication and delivery of care using virtual patient avatars.
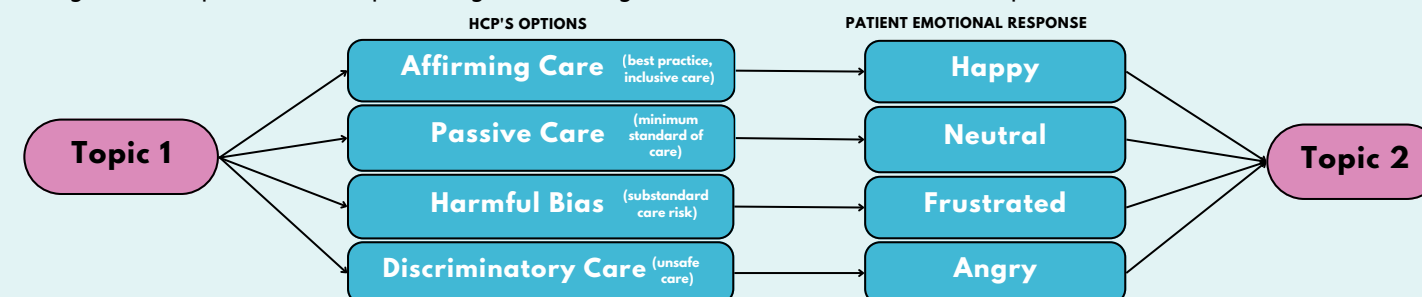
Methodology

The e-learning module was developed using the Kern Cycle of curriculum development, a six-step framework that includes:

(1) problem identification, (2) needs assessment, (3) defining goals and objectives, (4) selecting educational strategies, (5) implementation, and (6) evaluation.

Problem identification and needs assessment were informed by prior SGDc research and an internal survey that revealed gaps in healthcare providers' knowledge, confidence, and communication practices when caring for 2SLGBTQIA+ patients. These findings informed the module's learning objectives, which focused on developing inclusive communication skills and promoting patient-centred care. Educational strategies involved integrating a knowledge hub and virtual patient scenarios (inspired by real stories) aligned with four core pillars: pronouns, sexual orientation, gender identity, and relationship diversity. Implementation followed an iterative approach with feedback from HCPs, patient partners and content experts while evaluation incorporated usage analytics and interaction data to guide refinement.

Pronouns
This module is all about pronouns! You'll learn about all the different kinds of pronouns and why it's important to be respecting of patient's pronouns.

Sexual Orientation
This module is on sexual orientation! We'll teach you about when it is important to know your patient's sexual orientation and how to ask patients in an inclusive manner.

Gender Identity
This module is about gender identity. We'll talk about various gender identities, gender-affirming care, and when to ask a patient their gender and assigned sex at birth, respectfully.

Relationship Diversity
This module is on relationship diversity! You'll learn about different styles of relationships and how to make your patient's partner or partners feel accepted.

Chatten Lexy Max Ross

To enhance experiential learning, the module employed a gamified, simulation-based format using "choose-your-own-adventure" scripts. Four virtual patients—Chatten, Lexy, Max, and Ross—representing diverse 2SLGBTQIA+ identities were created, alongside chosen family members and a healthcare provider, Dr. Sam. Each scenario allows learners to navigate clinical interactions by selecting dialogue or action options that reflect different communication approaches. Responses presented within the module adjust dynamically based on the user's selections. Immediate feedback is given after each choice, reinforcing effective practices and providing corrective guidance when less inclusive responses are chosen.

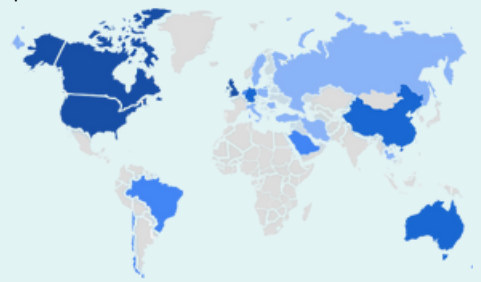| HCP'S OPTIONS	PATIENT EMOTIONAL RESPONSE
Affirming Care (best practice, inclusive care)	**Happy**
Passive Care (minimum standard of care)	**Neutral**
Harmful Bias (substandard care risk)	**Frustrated**
Discriminatory Care (unsafe care)	**Angry**

Topic 1 → ... → Topic 2

Results

International learner engagement observed with a demonstrated high interest in the 'pronouns' section of the module.

Top 3 countries:
- Canada
- USA
- UK

Additional users from:
China, Germany, Australia, and more. Overall, the e-module saw users from 33 countries.

Module was accessed internationally by 1,970 unique users overall
Across the implementation period, the platform accumulated 5,088 page views
...
~70% of learners who created an avatar completed at least one full patient scenario

Results suggest...

- Learners most frequently accessed the *pronouns* content in our module, indicating this topic as a priority area of need and an under-addressed communication skill in oncology care.
- Content is broadly relevant, despite being designed within a cancer-care context - as suggested in our strong international uptake.
- Frequent access to our Knowledge Hub alongside virtual patient scenarios supports the value of combining foundational learning with experiential practice.

Overall...

Findings support the module's relevance and usability as a platform for practicing inclusive communication in longitudinal cancer care relationships. Ongoing analytics-informed evaluation will be necessary to inform next-phase decisions regarding broader uptake, curricular integration, and expansion of patient scenarios to reflect more complex identities and care experiences, with the goal of strengthening inclusive, patient-centered cancer care.

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