

The Nuxalk Pharmacy Program: Perspectives of Patients, Clinicians, and Student Learners in a Rural and Remote Indigenous Context

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Background

Rural and remote Indigenous communities experience challenges with safe medication use, often exacerbated by limited transportation, shortages of healthcare providers, and gaps in culturally safe, patient-centered care. The Nuxalk Nation, located in the central coast of British Columbia, has identified a clear need and priority to action safe medication practices by improving access to clinical pharmacy services that are integrated with traditional Nuxalk knowledge systems.

Purpose

The project aims to build, implement, and evaluate a new pharmacy program integrated with Nuxalk Health and Wellness' home and community care.

Clinical pharmacy services include:



Medication Management Appointments



Medication Education



Diabetes & Hypertension Monitoring

The program is built on the Nuxalk phrase, "iixsatimutilh" – we are medicine for each other, with a focus on relationships and a holistic understanding of both western and traditional medicines. The purpose of the evaluation was to examine patient and clinician perspectives on the program and student learning experiences.

Methods

The EPIS Framework, which guides sustainable project implementation in allied health systems, was used to direct this project's operational process and comprises 4 phases:

Figure 1: EPIS Framework



- Exploration:** identified needs, priorities, and expectations for clinical pharmacy services from community perspective
- Preparation:** explored potential barriers to service provision:
 - Accessibility: delivered care in home and community settings
 - Western bias: ensured clinicians asked about traditional medicine use, and created a pathway for referral to cultural healing
- Implementation:** delivered the pilot program to 10 patients at Nuxalk Health and Wellness. Evaluation was conducted through semi-structured interviews with patients, clinicians, and students following pilot delivery.
- Sustainability:** currently developing strategies to ensure the program's long-term viability in meeting evolving community needs.

Results

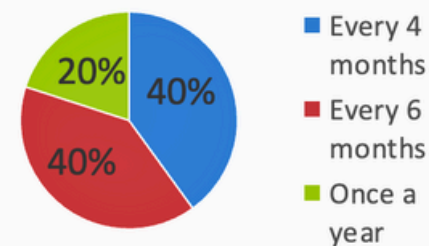
Table 1: Patient Interview Responses (n=5)

Scale of 1 to 5 (1 being poor and 5 being excellent) rating of clinical services
5/5 score from 100% of surveyed patients

Feedback on clinical pharmacy services

- Felt better equipped on handling medication regimens
- Felt questions were addressed and enough time was allocated
- Would like more conversation on traditional medicines

Preferred frequency of clinical pharmacy services



Preferred location of clinical pharmacy services

- At Nuxalk Health and Wellness clinic
- A virtual option should be included to increase accessibility

Table 2: Clinician Interview Responses (n=3)

Emphasis on lack of capacity at Nuxalk Health and Wellness Clinic

- High staff turnover
- Challenges training fly-in staff unfamiliar with local culture
- Rapid growth at the clinic makes program implementation challenging
- Care must serve all patients; funding limited to Indigenous care may cause misunderstandings with non-Indigenous patients

Ideas on expanding pharmacy services through holistic, patient-centered care

- Full-time pharmacist needed for Q&A, med reviews, and providing promotional/educational material
- Promote traditional medicine use, land-based healing, traditional foods, and smudging to enhance culturally-safe care
- Clinical service should be client-centered, private, holistic, and reflect food as medicine
- Options should be given for location of treatment to provide patient-centred care

Table 3: Student Learner Interview Responses (n=4)

Student goals to enhance care provision

- Patient-friendly communication
- Knowledge of high priority conditions
- Cultural safety in patient interactions

Challenges with adapting SOAP note documentation to rural/remote settings

- Limited technology for documentation and verification
- Less detailed data collection compared to class settings
- Rapid pace of information gathering makes it difficult to keep up
- Difficulty adapting to the SOAP note structure in rural/remote settings

Improving care through culturally safe, consistent, and community-informed services

- Cultural safety programs should be mandatory for pharmacists working with Indigenous patients
- Our clinical services should be expanded and conducted more frequently
- Host information sessions on common conditions the community is facing
- Ensure a team member familiar with patients is present to provide background history and support, especially during home visits

Themes

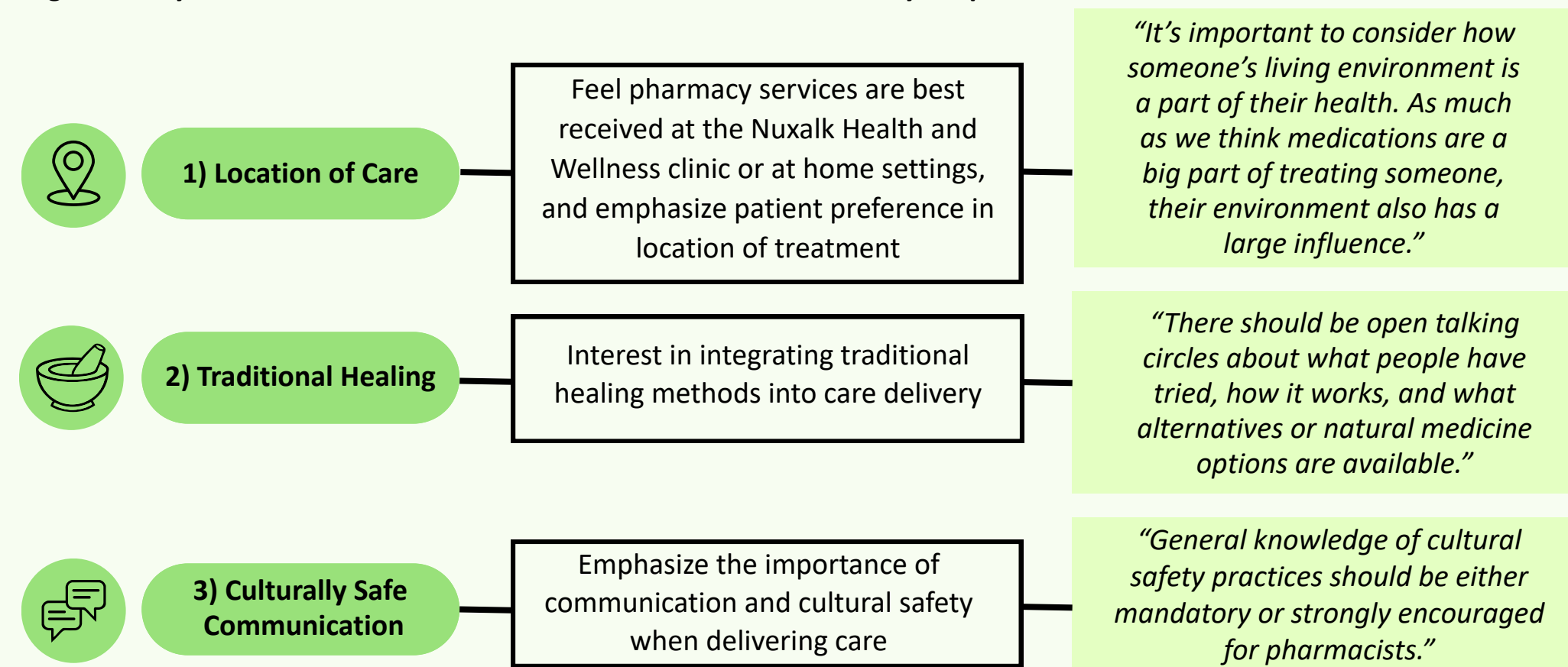
Table 4: Patient/Clinician/Student Learner Demographics

	Patients (n=5)	Clinicians (n=3)	Student Learners (n=4)
70+ years old	60%		
Male	60%	0%	25%
Indigenous	100%	67%	50%
Experience receiving one-one clinical services from a pharmacist	60%		



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Figure 2: Key Themes from Patients/Clinicians/Student Learners Survey Responses



Significance of Results

The Nuxalk Pharmacy Program is one of the first of its kind in a rural and remote Indigenous community in BC. The findings have important implications for pharmacists and student learners, offering insight into how cultural factors shape practice and cautioning against assuming that standard approaches- whether in location, services, or communication- align with community needs.

Our qualitative data reveals that:

- Clinical services should be more frequent and consistent to address staff turnover and support cultural familiarity
- Pharmacists should initiate conversations on traditional healing
- Assumptions about patients preferring traditional pharmacy/hospital care environments don't hold; home or community-based care is preferred
- Student learners require practical, hands-on experience in rural/remote Indigenous settings; current Western-biased pharmacy education is limited in providing this

We have addressed this data with 3 outputs:

- Biannual in-person community visits and annual Elders' lunches, complemented by monthly Zoom appointments, and culturally relevant educational materials on priority topics
- Development of a traditional medicines program for Indigenous communities and student learners, guided by a Knowledge Keeper
- Creation of the place-based learning elective PHRM 300 within the UBC PharmD program, enabling students to engage directly with the land and integrate Western and traditional knowledge systems

Limitations

- Small sample size (n=12), limiting generalizability to the entire Nuxalk Health and Wellness community
- Non-Indigenous patients were not included; findings may not reflect their perspectives
- Short-term evaluation; long-term outcomes and sustainability remain unassessed