


I-CAN

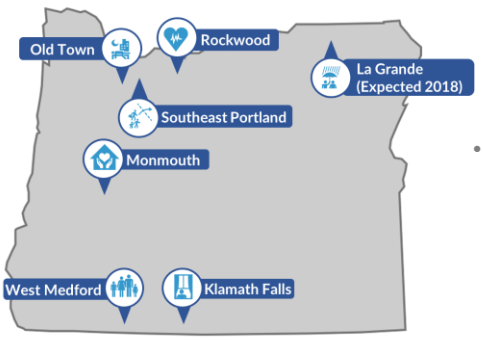
Oregon Health & Science University
Interprofessional Care Access Network

Despite the health care transformation efforts of this decade, the US healthcare system continues to be fragmented, expensive, and ineffective at addressing the root causes of individual and population health. Healthcare systems and providers are expanding the focus of clinical care models to optimize health and well-being through community-based models of care incorporating the social determinates of health (SDH), which are contributing causes of illness and indicators of morbidity and mortality.

The Affordable Care Act of 2010 provided unprecedented opportunities for healthcare reform and health professions education. The Institute for Healthcare Improvement Triple Aim Initiative framed three goals: (1) Improve the patient experience of care, including quality and satisfaction, (2) Improve the health of populations, and (3) Reduce the per capita cost of health care. In response, Oregon has been a leader in testing new health systems and community-based models of care through coordinated care organizations (CCOs). Based on evaluation of key metrics and consistent with national priorities, the state is progressing to CCO 2.0, with an expanded focus on the integration of SDH and health equity.

The I-CAN Model

Oregon Health and Science University has developed the Interprofessional Care Access Network (I-CAN), an innovative clinical education program that provides effective care coordination through partnerships between community-based agencies and the University. Health professions students are prepared interprofessionally to provide team-based, client-centered and SDH-oriented care that achieves health outcomes.



I-CAN is an innovative model that:

- Focuses on SDH, which influence prevention and chronic disease management;
- Provides care coordination under supervision of a nurse faculty-in-residence in a community faculty practice role;
- Includes clients who are outside of the primary care system;
- Engages interprofessional student teams in community-based health assessment and intervention;
- Maintains long-term commitments to community partners and clients;
- Is neighborhood and community-based, supporting relationships among local agencies and connecting clients to services and resources in their own communities;
- Identifies population health issues specific to neighborhoods and communities through engagement with individuals and families, and collaborates with community partners to prioritize interventions cultivated over time and across academic terms.

> *It is clear that the students learn a great deal about the lives and needs of low-income families. The students provide tremendous support, assistance and reassurance to our families.*
> — Susan Bash, Southern Oregon Head Start, West Medford Neighborhood

Neighborhood Community Academic Practice Partnerships (NCAPP)

I-CAN was established in 2013 and serves diverse 6 urban, rural and frontier communities in collaboration with local partner agencies. NCAPP partners in each community share services, refer clients, and participate in regular meetings and evaluation activities.

OHSU

> *I could not have lived the last 3 months without you. We loved having you at our home. I learned so much. Thank you. – I-CAN client*

Community partners include federally-qualified health centers (FQHC's), community dental clinics and social service agencies. I-CAN addresses client and population health needs through the work of interprofessional faculty-supervised student teams from OHSU's Schools of Nursing, Medicine, Dentistry, the Physician Assistant Program, the Graduate Program in Human Nutrition, and the OHSU/OSU College of Pharmacy.

The I-CAN Program

Nursing faculty-in-residence (FIR) collaborate with community partners to identify and refer clients who may be resistant to conventional approaches to health care, require additional resources and services, and/or have fallen through gaps in the safety net. Typically, individuals have a history of non-acute ED/EMS utilization, missed medical appointments, and unmanaged chronic illness. They may lack a primary care home, healthcare insurance, or stable housing. Most are poor and socially isolated.

Through home visits, interprofessional student teams work with clients over weeks and sometimes months to identify goals, set priorities, and develop a care coordination plan focused on navigating the healthcare system, increasing health literacy, and reducing barriers to health. Students meet with community partners weekly to report client progress and plan next steps, and each NCAPP meets quarterly to identify population level issues and strategize around project development and resources.

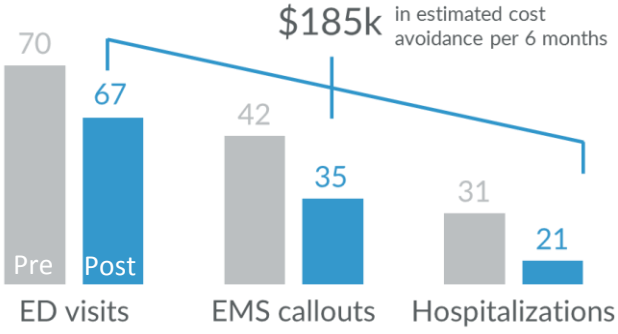
Evaluation

Methods. I-CAN uses a mixed-methods approach to evaluation. Quantitative data are collected at baseline, on every twelfth visit, and on exit. Data collected include demographic and healthcare utilization measures, as well as an established inventory focused on social determinants of health, medication and pain management, mental and oral health. Qualitative data include narrative documentation of student interactions with participants and participant satisfaction surveys.

Clients. On admission to I-CAN, 7% of clients lacked health insurance and 7% had unstable housing (defined as shelter, not housed, or friend's home). Of all I-CAN clients, when asked about the 6 months prior to participation, 51% had been to the ER, 35% had called EMS at least once, and 34% reported at least one hospitalization.

38%
Of clients improved their access to food

35%
Of clients improved their housing status



Outcomes. I-CAN has demonstrated positive impact on at least three critical indicators as identified by Oregon's Coordinated Care Organizations: reduced ED visits, EMS calls, and hospitalizations. The I-CAN program has seen substantial improvements in many social domains: 51% of clients increased their medication literacy, 50% increased their ability to manage chronic disease, 45% improved their ability to manage chronic pain, 39% improved their ability to manage medications, 35% improved their housing status, and 33% improved their health insurance status. All data covers 2013-2017, during which time 262 clients participated in the I-CAN program.

> *I-CAN was an incredibly valuable experience for me as a future nurse. I learned more about myself and how to work as a team member than I ever imagined. I am beyond grateful for this opportunity and will value it as I move forward with my career. – I-CAN Student*

Student experience

Over 1000 students have participated in I-CAN, learning about the SDH from an individual and community perspective. Evaluation has shown increased competency in team-based decision making and team functioning.

Dissemination

The I-CAN program has supported poster and podium presentations by interprofessional faculty, students and community partners at over 50 state, national and international conferences.

Future of I-CAN

The success of I-CAN in improving health outcomes has led to new collaborations and data sharing with the CCOs and other community partners, and projected expansion to a seventh community in La Grande, Oregon.

Contact

For questions about I-CAN reach us at i-can@ohsu.edu or visit our website.

May 21, 2018

OHSU