

Volume 14, 8 December 2014

Publisher: Igitur publishing

URL: <http://www.ijic.org>

Cite this as: Int J Integr Care 2014; WCIC Conf Suppl; [URN:NBN:NL:UI:10-1-116618](https://nbn-resolving.org/urn:nbn:nl:ui:10-1-116618)

Copyright: 

---

Conference Abstract

## **Implementation of a Tribal Participatory Chronic Care Model (TP-CCM): Integrating Primary and Community-based Care to Coordinate Diabetes Management on Wind River Indian Reservation, Wyoming USA**

*Kathryn Langwell, Sundance Research Institute, United States of America*

*Catherine Keene, Eastern Shoshone Tribal Health*

*Kelley Le Beaux, Sundance Research Institute, United States of America*

*Linda Chioma Ogu, Sundance Research Institute, United States of America*

*Matthew Zullo, Sundance Research Institute, United States of America*

Correspondence to: **Linda Chioma Ogu**, Sundance Research Institute, United States of America, E-mail: [logu@econometricainc.com](mailto:logu@econometricainc.com)

---

### **Abstract**

**Background:** Age-adjusted diabetes prevalence is 15.9 percent among American Indian and Alaska Native adults served by the U.S. Indian Health Service, the highest among all U.S. racial and ethnic groups. From years 2000-2009, Northern Plains tribal communities also experienced the highest age-adjusted diabetes death rate across all Indian Health Service regions, exceeding the national rate for American Indians and Alaska Natives by almost 50 percent. While there has been considerable development of strategies to reduce diabetes risk factors in the American Indian and Alaska Native population, additional evidence is warranted of their effectiveness when directed by the tribal communities themselves.

**Theory and methods:** The proposed Tribal Participatory Chronic Care Model (TP-CCM) is an approach integrating fundamental aspects of Tribally-Directed Participatory Research and the Chronic Care Model. Tribal members inform adaptations to the community, health system, self-management support, delivery system design, decision support and clinical information systems components of the traditional Chronic Care Model to foster productive interaction between tribal entities and a public health care system. The Wind River Alliance to Reduce Diabetes Disparities program integrated various patient-level, provider-level and system-level interventions using the TP-CCM and targeted barriers to diabetes management on Wind River Indian Reservation.

**Results:** The TP-CCM improved dietary behavior, clinical endpoints and self-management support at the patient-level; cultural competency and health care delivery at the provider-level; and collaboration, referral processes and shared clinical information between tribal government and federal government health systems.

**Conclusions:** The Wind River Alliance to Reduce Diabetes Disparities program provides encouraging preliminary evidence that the TP-CCM can serve as a structured community-clinical approach to support tribal communities with high chronic disease prevalence.

## Keywords

**tribal communities; chronic care model; disparities; community-clinical partnership; diabetes**

---

## References

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2014. Atlanta, GA: U.S. Department of Health and Human Services; 2014.
  2. Espey DK, Jim MA, Cobb N, Bartholomew M, Becker T, Haverkamp D, Plescia M. Leading Causes of Death and All-Cause Mortality in American Indians and Alaska Natives. *American Journal of Public Health*: June 2014; 104(S3):S303-S311; doi:10.2105/AJPH.2013.301798.
  3. Belcourt GM, Belcourt C, Langwell K, Schurrer R. Tribally-Directed Participatory Research: Lessons Learned from RWJ Building Community Supports for Diabetes. APHA 134th Annual Meeting and Exposition. November 2006 Boston, MA . American Public Health Association, 2006.
  4. Mariella P, Brown E, Carter M, Verri V. Tribally-Driven Participatory Research: State of the practice and potential strategies for the future. *Journal of Health Disparities Research and Practice* 2009; 3(2): 41-58.
  5. Bodenheimer T1, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness.
  6. *JAMA* 2002; 288(14):1775-9.
  7. Funnell MM, Brown TL, Childs BP, Haas LB, Hosey GM, Jensen B, Maryniuk M, Peyrot M, Piette JD, Reader D, Siminerio LM, Weinger K, Weiss MA. National Standards for Diabetes Self-Management Education. *Diabetes Care* 2011; 34(S1): S89-S96; doi:10.2337/dc11-S089 1935-5548.
  8. Diabetes Prevention Program (DPP) Research Group. The Diabetes Prevention Program (DPP) Description of Lifestyle Intervention. *Diabetes care* 2002; 25(12): 2165-2171.
  9. Jiang L, Manson SM, Beals J, Henderson WG, Huang H, Acton KJ, Roubideaux Y. (2013). Translating the Diabetes Prevention Program into American Indian and Alaska Native Communities. *Diabetes Care* 2013; 36(7): 2027-2034; doi: 10.2337/dc12-1250.
- 

## PowerPoint presentation

[https://www.conftool.net/integratedcare2014/index.php?page=downloadPaper&form\\_id=151](https://www.conftool.net/integratedcare2014/index.php?page=downloadPaper&form_id=151)

---