

Interprofessional Interventions to Enhance Quality of Care and Patient Outcomes in Type 2 Diabetes

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1 Context

Effective provider-patient communication is linked to improved patient satisfaction, health status, recall of information, and adherence¹⁻⁴

- **Poor communication** results in 19% higher risk of non-adherence
- **Good communication** results in 2.16-fold greater patient adherence
- **Communication training** results in 1.62-fold greater patient adherence

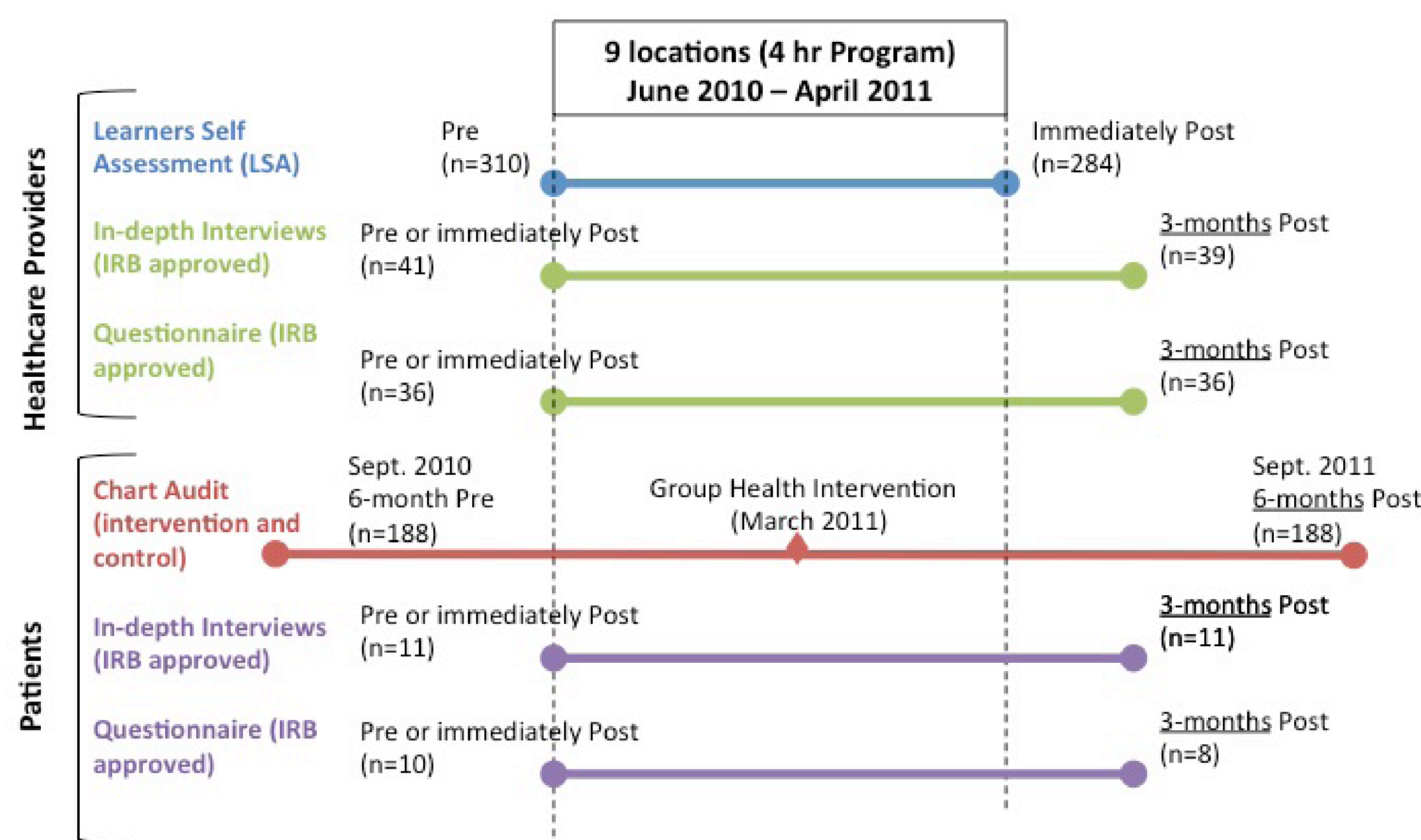
2 Design of Educational Initiative

- **Communication competency-building workshops with standardized patients**
 - Providing Evidence and Building Knowledge Base (45 minutes)
 - Building Competency to Improve Patient Outcomes – Expert-facilitated rotating small-group breakouts with Standardized Patients (SPs) (160 minutes)
 - Reinforcing Key Strategies: Putting it All Together – Discussion (60 minutes)

3 Learners

- **Designed for Primary Care teams who are not experts in T2D management**
- **512 participants attended the 5-hour live workshops delivered in 10 cities and states across the US with identified high T2D and obesity rates**

Evaluation Methodology



References

- ¹ Hall JA, et al. *Med Care.* 1988;26:657-675.
- ² Stewart MA. *CMAJ.* 1995;152:1423-1433.
- ³ Ong LM, et al. *Soc Sci Med.* 1995;40:903-918.
- ⁴ Haskard Zolnieriek KB, et al. *Med Care.* 2009;47:826-34.

Evaluation: Approach & Sample

The mixed-methods, time-series, evaluation consisted of pre/post self-assessment questionnaires, pre/post evaluation questionnaires and 3 month post qualitative interviews (sample of participants and their patients), and 6 months pre- and 6 month post-intervention patients' chart audit with control group (no intervention).

Description of Evaluation Sample

Profession	LSA (n=310)	In-depth Evaluation (n=52)	Chart Audit (n=188)	TOTAL (n=509)	% of evaluation sample
Physician	224	30	--	224	44%
Physician Assistant	6	--	--	6	1%
Nurse Practitioner	13	1	--	13	3%
Registered Nurse	37	9	--	37	7%
Other	16	1	--	16	3%
Did not answer	14	--	--	14	3%
*Patients	--	11	188	199	39%

* Patients did not attend program and were integrated in evaluation to triangulate findings reported by participants

Results and Program Impact

TALKING DIABETES WITH YOUR PATIENTS

PRACTICAL STRATEGIES FOR OVERCOMING BARRIERS

Group Health Chart Audit-Sample

Patient charts selected to ensure homogenous baseline data based on age, gender, and health indicators

		Control group (n = 91)	Intervention group (n = 97)
Age	Mean ± SD	55.60 ± 9.77	55.89 ± 11.04
	Range	23 – 74	20 – 74
Gender	% Male	54.4% (n=49)	52.6% (n=51)
	% Female	45.6% (n=51)	47.4% (n=46)

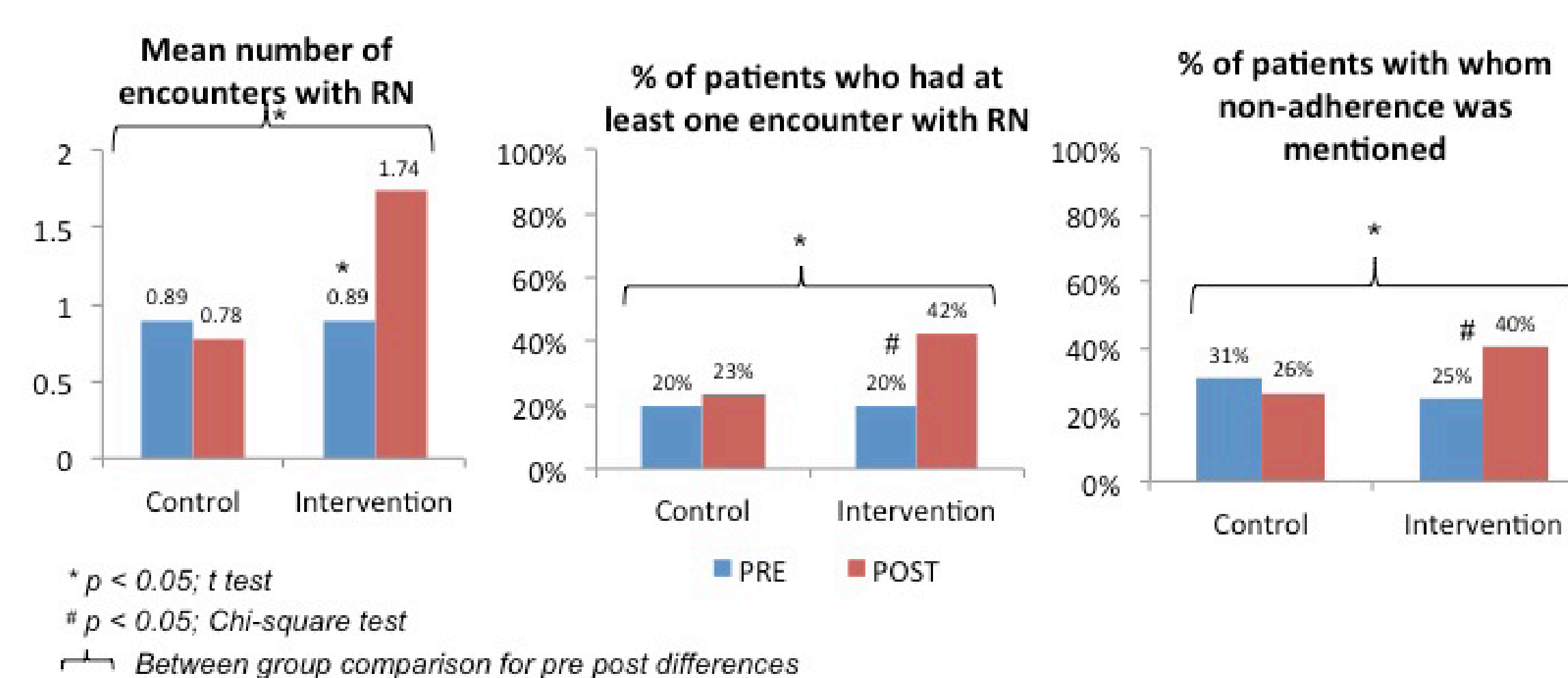
The intervention, conducted in a health cooperative of 24 primary care clinics in northwestern United States, involved sixty primary care providers (physicians and registered nurses) working with type 2 diabetes (T2D) patients, from 26 primary care teams (PCTs).

Patient chart audits showed a significant increase in number of encounters with RNs in the intervention group ($p \leq 0.05$). Follow-up encounters with clinical pharmacists and nutritionists increased (significance not reached). Significant decrease of blood pressure systolic values was observed ($p \leq 0.05$). Post data suggest PCPs willingness to treat high risk non-adherent patients increased.

Patient-Team Encounters

The intervention Group Health Chart Audit group showed:

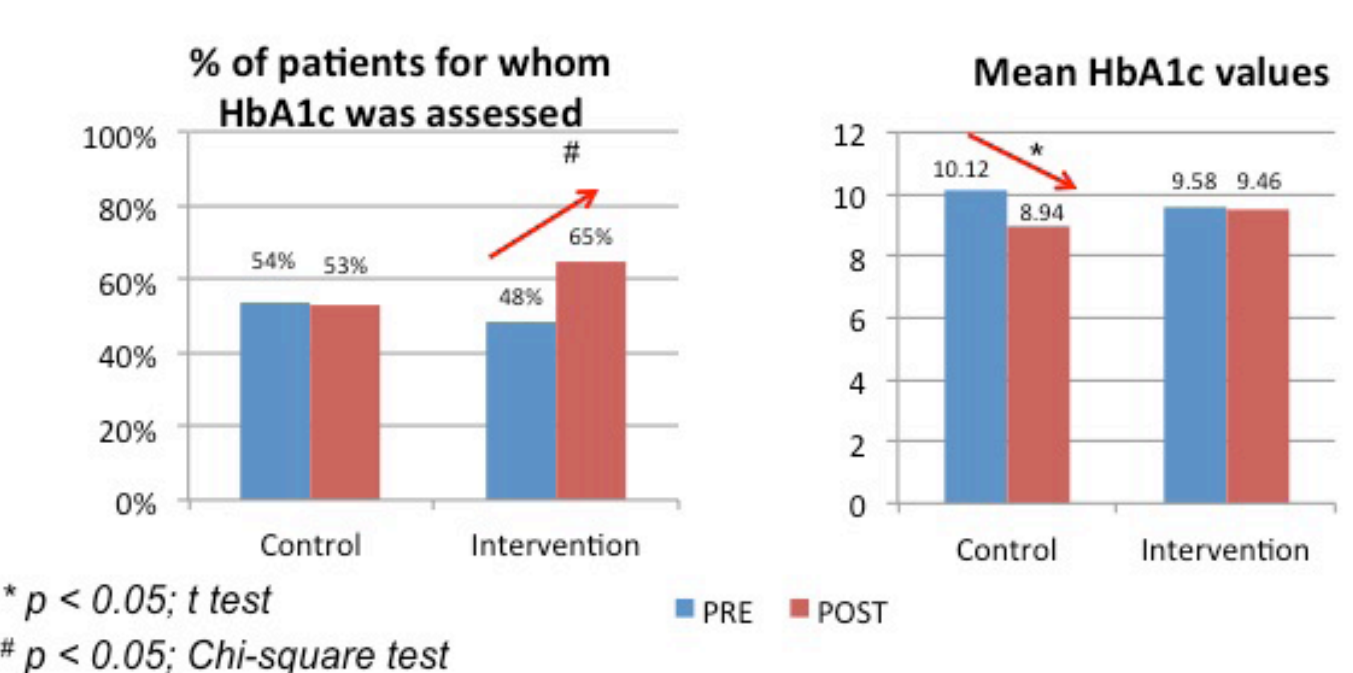
- Significant pre-post differences in intervention group
- Significantly larger improvements between PRE and POST than the control group



Patients reported changes in PCPs attitudes and functioning of the PC Teams. PCPs encountered some challenges incorporating all the tools and strategies learned into their practice

HbA1c Changes

HbA1c assessed more often in intervention group, but mean HbA1c lower in control group
⇒ Possible interpretation: members of intervention group are now assessing less adherent patients (with higher HbA1c) who weren't previously being assessed



Patient Story – Post- activity Interview

So I had an interview with both my Nurse and Doctor together about a month and a half ago. And we talked about my diabetes and how I could better control it. They were great listeners [...] And after a lot of discussion they asked me what I wanted to do. And so I told them [...] I don't want to think about the fact that I have diabetes. But, I can tolerate [injections in the] morning and before I go to bed. So we changed my shots schedule to just that.

Summary and Recommendations

- Our findings provide evidence of the positive impact of competency-based inter-professional educational interventions to improve clinical efficiencies and quality of care when deployed with entire care-teams.
- Empowering PCPs to better communicate as a team and to include their patients in that team can contribute to improved T2D management.
- To ensure full transfer of the learning into sustainable practice changes, it would have been beneficial to conduct reinforcing activities post-intervention, as participants reported challenges implementing tools and resources in their actual practice settings.
- 84% of participants completely or strongly agree that the program content was relevant to their practice needs, suggesting relevance of CME activities addressing communication - empowering providers to improve self-efficacy of their patients.
- The value of acquired skills and competence easily extends to other clinical contexts and disease states.
- We are adapting the live workshop format for the web-based delivery focusing on the following communication segments:
 - Setting a Shared Agenda
 - Behavioral Change Counseling
 - Building Rapport
 - Negotiating and Implementing a Treatment Plan
 - Telling a Diagnosis Meaningfully

Support

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