

Abstract

Introduction: Community health workers represent a growing health care workforce with the potential to shift the paradigm of chronic disease management, particularly with diabetes. The Diabetes Equity Project (DEP) in Baylor Health Care System employs Diabetes Health Promoters (DHPs) to provide diabetes education. The purpose of this study was to understand patient and primary care provider (PCP) perceptions of how DHPs enhance delivery of care and self-management of diabetes.

Methods: Semi-structured interviews were conducted with 12 DEP patients and 8 PCPs. Observational studies were conducted with 6 DHPs at different clinic sites.

Results: Interviews with DEP patients and PCPs highlight the main perceptions of DHPs' responsibilities. PCPs perceived DHPs to be valuable in providing direct communication with PCP, assessing patient barriers, follow up care, cultural competence, and time savings. Patients perceived DHPs to be valuable for patient empowerment, team approach, nonjudgmental listening, goal-setting, DHP as safety net, and spillover effects. Best practices for PCPs and DHPs include same-day appointments with DHP, DHP as part of clinical team, and shared beginnings at the clinic.

Discussion: DHPs are valuable clinical team members who play multiple roles in connecting patients and PCPs and improving quality of diabetes management. These findings suggest potential for improved care coordination, improved direct care from physicians, earlier identification of worsening diabetes, and time savings. Further research is needed to determine DHP effectiveness, increased PCP acceptance of DHP, and sustainability for the model.

Introduction

- Diabetes mellitus affects 25.8 million individuals in the U.S. (8.3% of population) and cost \$174 billion in direct and indirect medical costs in 2007
- Many diabetic individuals of minority and low-SES groups lack resources and understanding of their disease to manage it well
- DHP-led interventions are effective in reducing HbA1c, blood pressure, lipid levels, and increasing weight loss
- Limited evidence of patient and PCP perceptions of DHPs in diabetes management

Background

- DEP in Baylor Health Care System in Dallas, Texas employs bilingual DHPs to provide diabetes self-management education, nutritional counseling, and social support
- Preliminary data shows patients experienced sustained HbA1c reduction over 2 years ($P < 0.001$)
- Goal of this study was to understand patient and PCP perceptions of how DHPs enhance delivery of care and improve outcomes of diabetes patients

Methods

- Conducted semi-structured interviews with 12 DEP patients in English and Spanish and with 8 DEP PCPs
- Observed 6 DHPs at different community clinic sites

Results

Provider Perceptions (N=8)

- Direct communication:** "I get a lot of [the DHP's] information from EMR, but I get more info when she talks to me in person. Then I can ask her back questions, and she might have more insight."
- Assessing patient barriers:** "The DHPs help surface what are the big barriers...is it that the person is really depressed, or is this person afraid of insulin?"
- Follow-up care:** "The DHPs' biggest role is to be our 'eye on the patient' whenever [the patient] hasn't seen us, in between visits with me."
- Cultural competence:** "The DHP is from the community, so what she says holds more weight. She may better understand common misconceptions and be able to challenge [patients] in a way that the doctor in the white coat can't."
- Time savings:** "[The DHP] can spend more time on areas that need in-depth patient education that would not be efficient for a physician to handle."

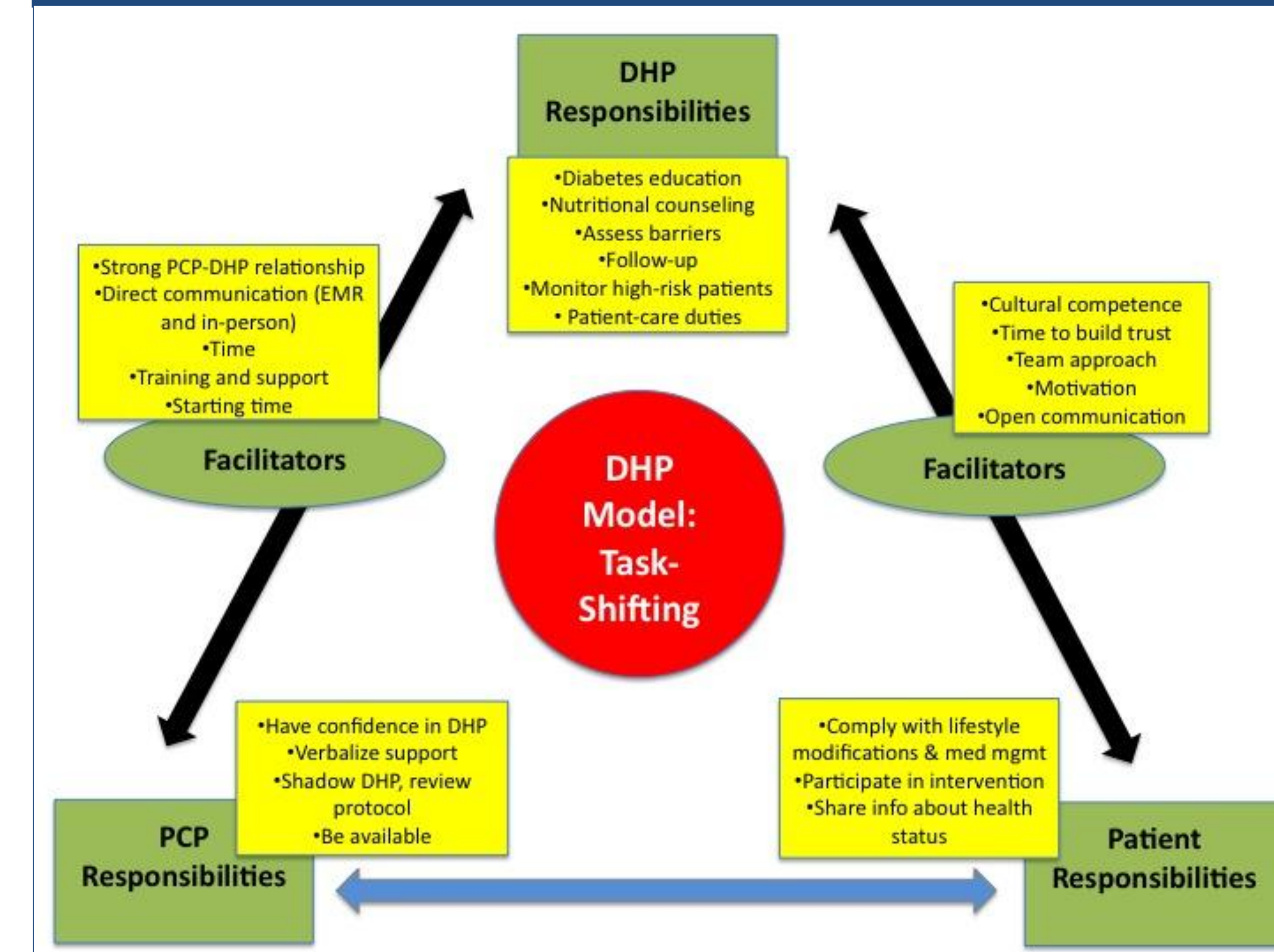
Patient Perceptions (N=12)

- Patient empowerment:** "[The DHP] would read my mind and say, 'You probably don't think you can do that, but you can.' She helps give me options."
- Team approach:** "Because of your illness, [the DHP] gives you guidelines to control it. But I had to be an active part of my healing process."
- Nonjudgmental listening:** "With this sickness, you feel kind of judged. Sometimes I don't want to talk about my diabetes with my family because they are judgmental. [My DHP] is different because she's not my family."
- Goal-setting:** "We set goals of walking 5 or 6 times a week. She said that's something I needed to do, but she never said I *have* to do it. She wants you to be comfortable."
- DHP as safety net:** "I know I can always call [my DHP]."
- Spillover effects:** "My family has a history of diabetes and my kids are just starting their lives. I've changed my habits and it carries over in my household."

Provider Best Practices

- Same-Day Appointment with DHP:** "If it's a brand new diabetic patient, I refer the patient to her to make an appointment that day...and try to make a personal interaction the day [patient is] here...It speeds up the [process]...this is not two separate parts of the clinic...this is all one big team that helps."
- Part of clinical team:** "I introduce the patient directly to [the DHP] on the first day...so they know she is part of a clinical team, so it's not like a separate thing that we don't pass on information to each other."
- Shared beginnings:** "I started [at the clinic] around the same time as [the DHP], so it was part of the clinic from the beginning for me."

Conceptual Model



Conclusion

- DHPs are valuable clinical team members who provide quality diabetes and self management education and coordinate care for underserved patients
- DHPs serve as educators, counselors, navigators, and critical partners in patients' diabetes management
- PCPs viewed DHPs as bridging cultural gaps and filling a unique niche in coordinating care for underserved patients
- Future studies should explore reasons for differences in patient and PCP perceptions in DHP-led programs
- Wide-scale implementation and sustainability of the DHP model will require further evidence of DHP effectiveness, PCP acceptance, and increased state certification programs

Implications

- Assess value of DHP model in other settings
- Increase DHP exposure during primary care residency and through physician champions
- Embed DHP in patient-centered medical homes through value-based purchasing

Acknowledgments

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