

Empowerment Diabetes Group Visit Curriculum for the Rural-Urban

Underserved: Development and Staff Training

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Abstract

Diabetes Mellitus is a major public health concern of epidemic proportion in the current health care climate of the United States. Obesity and sedentary lifestyle are primary risk factors for the development of type two diabetes (T2DM), and prominent in individuals of all ethnicities, genders, and socioeconomic status. Self-management plays a fundamental role in positive health outcomes for these individuals and therefore, attempts to improve patient knowledge, education and management of T2DM must be targeted. Group medical visits offer an innovative approach that is efficient, effective and affordable. The Doctorate of Nursing Practice (DNP) project addresses the inherent limitations of diabetes management in primary care through a quality improvement project and the creation of the Empowerment Diabetes Group. The DNP quality improvement project focus is threefold, including: The creation of an evidence-based curriculum for group diabetes visits, education and staff training, and the anticipation of organization constraints and barriers to implementation. The project takes place at La Clinica del Valle's Wellness Center, a federally qualified health center serving a rural-urban community.

Keywords: group diabetes visits, type two diabetes mellitus, shared medical appointments, diabetes self-management education, self-efficacy

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Type Two Diabetes Mellitus (T2DM)

Diabetes affects an estimated 29.1 million Americans with an estimated healthcare burden of 25 billion dollars annually (CDC, 2014). Minority status is an independent risk factor for diabetes, correlating with increased disease burden and healthcare disparities (CDC; Kollannoor-Samuel et al., 2012). Fifty-eight percent of patients at La Clinica del Valle (LCDV) identify as Latino or an ethnic minority, and ten percent of all patients are known diabetics (USDHHS, 2014). Health complications related to poor self-management and medical comorbidities increase individual burden and overall healthcare system costs. Therefore, the DNP quality improvement project aims to address this issue through the creation and proposed implementation of diabetes group visits within the LCDV microsystem (LCDV's Wellness Center) - with plans to expand implementation throughout the entirety of the LCDV macrosystem. Through addressing change on a local level, the doctorate prepared Advance Practice Registered Nurse (APRN) facilitates healthcare delivery systems and health outcomes for patients with diabetes.

Review of the Literature

A thorough review of the literature explored the breadth, scope and efficacy of group diabetes visits in order to inform the DNP project and Empowerment Diabetes Group curriculum. A secondary literature review addressed healthcare disparities, rural populations, patient education, curriculum development and the role of self-efficacy and empowerment in diabetes care. The DNP project captures the intersection of evidence and practice, whereby both factors play equal roles in curriculum development, staff training, and planning strategies

Group Diabetes Visits. Diabetes self-management education (DSME) is cornerstone to care and advocated by the American Academy of Diabetes Educators (AADE). The AADE Seven Self-Care Behaviors show efficacy in DSME programs (Hunt et al., 2014). Group

Diabetes Visits mirror traditional diabetes self-management education (DSME) programs and provide comprehensive patient education with the adjunct of interactive techniques and group interactions (Cohen et al., 2011). Group visits optimize time and reduce health care associated costs, while remaining patient-centered, interactive and empowering (Burke & O'Grady, 2012). Group diabetes visits effectively reduce HgA1c, cholesterol, and blood pressure—and, in one study 100% of patients recommended group visits to others (Ridge, 2012; Cohen et al., 2011; Dantje & Forrest, 2011). The American Diabetes Association (ADA) endorses standardization of group diabetes visits based on the National Standards for Diabetes Self-Management Education and Support, however others argue that uniformity may not best serve the needs of diverse patient populations (Riley & Marshall, 2010). In true collaborative fashion, the Empowerment Diabetes Group curriculum bridges evidence and practice to create a standard curriculum to meet the needs of LCDV's diverse patient population.

Rural Communities. Rural diabetics face additional challenges in comparison to their urban counterparts, and statistically have more disease burden. Healthy People 2020 initiatives emphasize quality of life and the reduction of disease burden through accentuation of three components: regular medical care, self-management and ongoing diabetes support (Burke & O'Grady, 2012). Patients attending group visits receive more medical and educational care per month compared to patients participating in one-on-one office, visits with the added benefit of focused self-management education and ongoing diabetes support (Clancy et al., 2007). Research looking specifically at rural diabetic populations identified self-management education, social support and regular communication with health care providers as facilitators to improve care and health outcomes (Hunt, Grant, Palmer & Steadman, 2014). Peer interaction plays a foundational role in the group visit model and facilitates successful lifestyle and behavioral

changes which are cornerstone to diabetes self-management (Burke and O'Grady, 2012; Siwik et al., 2012). As individuals from rural communities often lack social support due to geographic isolation, the inclusion of group visits gives rise to social support as improved communication with health care providers (Hunt et al., 2012). However, Bray et al. (2015) found that rural patients were less likely to attend group visits due to barriers related to driving distance and financial constraints related to gas prices, for example.

Empowerment and Self-Efficacy. All individuals face challenges sustaining the lifestyle changes necessary to reduce the morbidity and mortality associated with diabetes (Burke & O'Grady, 2012). Hunt et al. (2012) found that self-efficacy is a strong predictor of self-management in rural populations specifically. Siminerio, Piatt and Zgibor (2005) emphasize that rural patients receiving diabetic DSME demonstrate higher diabetic knowledge and empowerment levels, as well as better objective outcomes related to HgA1c and HDL levels. Patient empowerment scores, as rated by the validated Diabetes Empowerment Scale, positively correlate with improved HgA1c, cholesterol and blood pressure levels, self-efficacy and self-care behaviors, and improved knowledge and medication adherence (Hernandez-Tejeda et al., 2012).

Approach to the Conduct of the Project

The quality improvement project explores the interdisciplinary partnership between OHSU (DNP student and faculty chair) and La Clinica de Valle's Wellness Center staff (MD RN, Wellness Coordinator and MA) in order to address barriers to optimal diabetes patient care. The literature review and research of national standards informs the evidence-based curriculum for group diabetes visits, which can be found in Appendix A of this report. Evidence shows that staff training and education improve knowledge, streamline the provider process, and augment patient experiences (Stowell et al., 2015). The anticipation of organization constraints and

barriers help prepare LCDV for implementation while addressing unforeseen challenges.

Project Setting

The La Clinica de Valle Wellness Center is part of the La Clinica del Valle macrosystem in Southern Oregon, which serves 13 rural and six urban communities as classified by zip code tabulation areas (ZCTA) from the US Census (UDS Mapper, 2014). The Wellness Center offers three provider-led group visits that address either weight loss (Weight Loss Group) exercise (5 K Group) or nutrition (Budget Gourmet). The Empowerment Diabetes Group is a long anticipated addition to the current offerings, as nearly ten percent of LCDV patients are diagnosed with diabetes (USDHHS, 2014).

Processes. Evidence informs practice, yet clinic culture dictates implementation processes. The DNP student worked closely with a physician and nurse case manager to develop the Empowerment Diabetes Group curriculum based on the National Standards for Diabetes Self-Management and Support and the AADE Seven Self-Care Behaviors (Haas et al., 2014; AADE, 2014). The small work group met twice monthly for several months to modify the curriculum and discuss planning strategies. Support from the LCDV physician and nurse case manager ensured that the curriculum met the provider's expectations while also lending to national standards and evidence based recommendation. The AADE Seven Self-Care Behaviors formed the basis of the modular curriculum for the group.

Activities. Staff training and education was overseen by the DNP mentor, whom advised the DNP student in the entirety of the three-prong focused quality improvement project. The DNP student worked independently to create a staff training and educational session with oversight from the DNP mentor. The staff training and educational session discussed the Empowerment Diabetes curriculum, internal referral process, and intentions to expand the

curriculum throughout the LCDV macrosystem to make teaching and presentation materials available for all providers. Pre- and post-tests assessed the efficacy of the staff training and educational session. Baseline scores averaged 75% and improved to 98% after the intervention, showing that medical providers had an average level of education on group visits prior to the teaching session, which improved 23% from pre- to post-test scores. Staff training and education materials are included for review in appendices E and F.

Anticipated barriers, facilitators, challenges. Recruitment barriers have been identified both clinically, as well as in research studies, as challenges in group visits. The majority of patients attending group visits at the Wellness Center are primary care patients from the center, versus primary care patients from other LCDV clinics. In anticipation of this recruitment barrier, the staff training and education session discussed the internal referral process. We created two ways to schedule patients in order to improve scheduling processes. Providers can send an electronic message through the EHR to the wellness center group visit pool, or they can include instructions on the patient's after visit summary (AVS) so the patient can call to schedule on their own. The instructions give the patient basic information about the group visits, and the phone number for the scheduling coordinator at the Wellness Center.

Participants

The Empowerment Diabetes Group targets patients newly diagnosed with diabetes, as well as other diabetic patients with good or poor control. Rural populations (including migrant workers), and other Spanish speaking diabetic patients will be encouraged to attend. At this time, gestational diabetes patients will not be eligible to attend the EDM Group. In order to make the visits financially sustainable, eight to twelve patients must attend each session; the maximum group size is fifteen to twenty participants. As PCP referral is amongst the most

helpful marketing strategy, all LCDV providers have been educated on the referral process in order to augment recruitment (Dantje & Forrest, 2011). The Health Insurance Portability and Accountability Act (HIPAA) will be upheld in all interactions. Group visits will not be implemented during the DNP project, therefore no additional precautions are needed to protect participants. However, once visits are implemented, LCDV will protect patient privacy per their standard protocols. Additionally, patients will sign the LCDV Group Confidentiality agreement prior to attending the EDM group, to ensure that each patient's confidentiality is upheld.

Proposed Implementation and Outcomes

The Empowerment Diabetes Group has been created based on national standards as well as the AADE Seven Self-Care Behaviors. Initially, planned for implementation April 18th, 2016, the first Empowerment Diabetes Group has yet to take place due to implementation barriers within LCDV. The curriculum is modular versus cumulative, meaning patients will benefit from attending a group visit at any point during the seven-week cycle. A different diabetes self-care topics will be discussed each week. Vital signs are collected at the beginning of each group and patients will have the opportunity to discuss any specific concerns with the provider. This discussion and assessment easily meets billing requirements for a 99212 visit. Evidence shows that opening group activities help create group cohesiveness and trust, therefore each group will have a "Myths: Let's bust them!" opening activity based on the weekly topic (Rutledge, 2012). Metaphors will be used to simplify information and the didactic focus of the group will be limited as this has more effective for patients (Trento et al., 2001). The EDM group focuses on a hands on engagement with the material, and each module will include an opening group activity, short discussion and teaching session, a hands-on engagement with the topic material activity, goal setting and review of most pertinent pearls from the session.

In addition to the curriculum development and Empowerment Diabetes Group implementation, LCDV plans to move forward with a more formal provider training session. Evidence shows that staff training, including processes and procedures of group visits streamlines the group visit process, and increases patient satisfaction (Clancy et al., 2007; Cole et al., 2013). La Clinica del Valle Providers are also welcome to attend any group visits at the Wellness Center to gain more first hand knowledge.

Implementation procedures

La Clinica del Valle, as a macrosystem, published an institutional wide provider orientation guide to group visits that outlines implementation procedures on a general level. Of interest, provider self-efficacy is outlined as a provider skill-set, as well as the belief in group care and the ability to empower patients. Training modules include: motivational interviewing, group visit coding and techniques for dealing with difficult patients. The next phase of provider orientation would include an informational session on the Empowerment Diabetes Group curriculum and include overview of group conduct.

Implementation of the Empowerment Diabetes Group will be led by the physician, RN and medical assistant. Three other Wellness Center group visits are currently being offered, therefore medical and auxillary staff are well versed in the procedures of group visits. Fortunately, the group visit model has been part of the Wellness Center since it's opening in 2015, and will only continue to grow.

Proposed measures

Quantitative and quality measures will assess efficacy of the Empowerment Diabetes Group. Quantitative measures include: blood pressure, HgA1c, cholesterol and blood glucose levels. As the EDM group is modular, meaning patients may come one week but not the next,

objective data from diabetic patients who have attended the EDM group will be compared to a control group: diabetic patients that have not attended an EDM group. Evidence states that diabetes self-management leads to improved outcomes, yet self-management behaviors are not quantitative in measure. Therefore, it is imperative to use validated scales to assess patient self-efficacy like the Diabetes Empowerment Scale- Short Form (DES-SF) for example. Due to lower literacy levels within the LCDV population, this scale may not be valid for measurement in this population, which has a low level of literacy. One proposed measure is to use the scale on a pilot basis (within the group) to assess its efficacy. Another proposed measure is to use the opening activity “Myths: Let’s bust them!” as a pre- and post- tests in order to assess knowledge level before and after the group visit. The Dale-Chall Readability Index literacy calculators estimated EDM group materials at a fourth grade reading level (readability calculators, n.d.).

Practice-related Recommendations

The National Standards for Diabetes Self-Management Education and Support outline ten standards to address in the provision of ongoing diabetes care. The EDM group meets internal structure and external output standards through addressing the group’s mission statement with clear goals and objectives, while maintaining a patient centered and culturally relevant approach. The access standard identifies specific population needs through assessment of patient demographics and barriers to care. Program coordination standards are upheld by the DNP student and mentor, as well as the physician and nurse manager team. The instructional staff includes the aforementioned program coordination team, with the addition of the Integrated Behavioral Health (IBH) staff and the Community Health Workers (CHW) whom work intimately with the diabetic patients at LCDV. The curriculum is evidence-based and includes the AADE Seven Self-Care Behaviors: healthy eating, being active, monitoring, taking

medications, problem solving, reducing risks and healthy coping. An individualized approach to patient management is upheld within the EDM group philosophy and patient-centered focus.

The individualization standard also addresses collaborative goal setting and motivational interviewing, which are foundational components built into the group visits. Ongoing support is provided through the ongoing wellness center groups, as well as wellness center classes. LCDV patients are eligible to attend two dollar drop-in yoga and zumba classes, or can buy a ten punch card for ten dollars. The patient progress standard is met through the use of information systems and technology, which record patient goals in the electronic medical record EPIC and can measure progress overtime. Lastly, the quality improvement standard is met through the ongoing assessment of the group's efficacy and outcome measures.

Conclusions

Evidence based guidelines influence practice standards and the development of quality improvement initiatives within clinical macrosystems. However, the unique characteristics of a patient population call for individualized approaches. Group diabetes visits meet national standards for self-management education while implementing innovative healthcare delivery systems. Diabetes poses a major public health concern, warranting the initiation of effective, affordable and efficient means to meet patient self-management needs. The Empowerment Diabetes Group provides comprehensive patient education with interactive techniques and a hands on engagement with self-management strategies and goal setting. The peer interaction component of group visits facilitates self-management for rural diabetic patients (Hunt et al., 2014). Self-efficacy and empowerment predict self-management and can be measured through validated scales like the DES-SF. The life changes needed to sustain change can be challenging for any populations, but more so when coupled with low health literacy and other health

disparities. The interdisciplinary relationship fostered through OHSU and LCDV set the stage for the implementation of the Empowerment Diabetes Group, which aims to address barriers to optimal diabetes management in the primary care setting.

Summary

Group diabetes visits emphasize diabetes self-management education and foster relationships amongst patients, while increasing the frequency that patients interface with the healthcare system. Improved access to care, communication with health care providers and ongoing diabetes support meet national standards and recommendations for diabetes care. Evidence proves that group visits improve outcome measures including: HgA1c, cholesterol and blood pressure while also improving knowledge and active engagement with disease engagement. The techniques implied in the Empowerment Diabetes Group engage patients with self-management through interactive techniques, goal setting, group dynamics and hands on activities. The creation of the Empowerment Diabetes Group at La Clinica del Valle sets the stage for a culture of community, targeted diabetes education and the self-efficacy necessary to maintain success.

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Appendix A

Empowerment Diabetes Curriculum Outline: Patient Version

Intro: Vitals (BP, HR, weight, +/- CPG) (10 minutes)

What is a Group Visit (5 minutes)

Group Visit Myth busters

Course Content

Module I: Healthy Eating

Myths: Let's bust them! (15 minutes)

- Most people find it hard to change their diet
- Having diabetes means I can't eat my favorite foods
- Skipping breakfast helps you loose weight
- I would eat better if I did the shopping or cooking
- Eating healthy is more expensive than fast foods or processed/ready made foods
- Eating 1 less tortilla or piece of bread per day won't make any difference in my health or diabetes

Talking Points (15 minutes)

- I have diabetes, what can I eat?
- How do I still eat my favorite types of foods without making my diabetes worse?
- Why is breakfast so important?
- How can I eat on a budget but still eat healthy?
- What are strategies to shop smarter?
- What the basics of carb counting?

Activity- choose one per session (30 minutes)

- Mobile Pantry
- Food Label Activity
- Portion Size Activity
- Shopping Strategies
- Recipes

Taking Action: Meal Plan/Goals (15 minutes)

- What do you want to change? How will you change it? (think about how much you will include or reduce by) When will you make changes? (time of day, meal, days of the week) and How often? (how many times per week). Are you confident (at least a 7 or more that you can make this change?)

Take Aways (5 minutes?) Also on the epic dot phrase for the AVS for each visit.

- Start with small goals I am confident I can achieve
- Try new things when it comes to food
- Eat fresh! Fill up on healthy fruits and veggies rather than carbs
- Don't go too long without eating, and remember small frequent meals are best
- Shop fresh! Choose whole grains, lean meats, fruits and vegetables (outer aisles of the grocery store)

Module II: Being Active

Myth: Let's bust them! (15 minutes)

- If I can't exercise regularly, I don't exercise

- Exercise makes me tired or makes my joints hurt more
- Five minutes of exercise won't make a difference in my health
- Exercise requires going to a gym or having a formal exercise plan
- Exercise alone can't lower my blood sugar
- If I exercise, I shouldn't take my diabetes medications

Talking Points (15 minutes)

- What counts as exercise?
- What exercise is good for someone who generally dislikes exercise?
- What motivates people to exercise even when they don't want to?
- Who has tried a class at La Clinica?
- What exercise classes are available at La Clinica and how much do they cost?

Activity- choose one per session (30 minutes)

- Chair Exercise Activity (see video)
- Gentle Stretching (see video)
- Short Group Walk

Taking Action: Exercise Prescription (15 minutes)

- What type of physical activity? (walking, dancing, playing with kids/grandkids, fishing, treadmill, stretching, weights, etc.) How frequent? (how many times per week). For how long? Be specific! (3 minutes, 5 minutes, 10 minutes, 15 minutes, 20 minutes, 30 minutes, 1 hour) What type of intensity? (light, moderate or intense). How confident are you that you can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.

Take Aways (5 minutes?) Also on the epic dot phrase for the AVS for each visit.

- Start slow! 5 minutes of exercise is better than none!
- Walking counts!
- Good shoes matter
- Involve your family, friends, or pet and be accountable to each other.
- Walk indoors or gear up in bad weather
- La Clinica offers affordable classes: Zumba, Yoga as well as Group Visits: 5 K group
- Check blood sugar before and after exercise
- Eat a carb and protein snack before you exercise

Module III: Monitoring**Myths: Let's bust them!** (15 minutes)

- If my blood sugar is well controlled or "pretty good" I don't need to check fasting (morning) blood sugars
- My AM fasting blood sugar will be higher if I ate a carb snack or dessert before bed
- It is best to check blood sugar whenever I remember
- My cholesterol only needs to be checked once per year
- If I want to know how my blood sugar is doing, I could have my HgA1c checked more frequently than every three months

Talking Points (15 minutes)

- When are the best times to check blood sugar?
- When is a bad time to check blood sugar?
- Why do we recommend checking HgA1c every three months (at most)?
- What are the different types of cholesterol?

- What are the A,B,C's of diabetes?

Activity- choose one per session (30 minutes)

- Using a log book to record your blood sugar
- Glucometer use and settings
- Injecting insulin
- Recognizing highs and lows

Taking Action: Meal Plan/Goals (15 minutes)

- What will I do to better monitor my diabetes? (example: use my home glucometer or come in for lab tests (HgA1C or fasting blood glucose) at La Clinica. How will I make this change? (example: check blood sugars, record blood sugars, administer correct amount of insulin based on glucose readings). How frequent will I check my blood glucose or HgA1c? (Example: multiple times daily, daily, weekly, monthly, every three months). How will I know if I have made an improvement? (example: my log book is filled out, I completed my labs tests, I came in for follow up with my provider or RN case manager, etc.). How confident are I that I can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.
- **Take Aways** (5 minutes?) Also on the epic dot phrase for the AVS for each visit.
- The ABC's of Diabetes Monitoring are: A: A1c (or HgA1c); B: Blood pressure and C: Cholesterol.
- Check HgA1c every 3- 6 months based on your individualized diabetes care plan (There is no need to check more often than 3 months).
- Check blood pressure in clinic or at home based on your individualized diabetes care plan. (It is usually not necessary to check your blood pressure everyday).
- Check cholesterol based on your doctor or provider's recommendation. In general, you should not go more than 6 months without having your cholesterol checked.
- Morning, or fasting blood sugar levels change based on what you eat the night before.
- The Dawn Phenomenon happens to all people whether or not they have diabetes. This means that blood sugar levels increase during the night or early morning. For people with diabetes, their body can't compensate for the increased levels as well. This is why we recommend checking early morning blood sugars, to monitor how your body handles the "dawn phenomenon".
- The best times to check your blood pressure include: 1.) Fasting (Before breakfast), 2.) Postprandial (2 hours after eating) and 3.) Before bed in the evening. Right after you eat a meal is not a good time to check your blood sugar.
- Remember to check your blood pressure if you are feeling sick!

Module IV: Taking Medication**Myths: Let's bust them! (15 minutes)**

- I have to take insulin. My diabetes must be really bad
- If I have a really high blood sugar, I should take two pills instead of one
- If my blood sugar is really good, I should skip my pills for the day or even for a couple days
- If I run out of medication on the weekend, I have to wait until Monday to call the clinic for more pills
- Lisinopril is a blood pressure medication and doesn't have anything to do with my diabetes

- Sometimes medications that are used for other medical problems have the added benefit of helping control diabetes

Talking Points (15 minutes)

- Why do some people need insulin and others do not?
- Should you ever take extra pills or skip pills?
- What is the best way to make sure you don't run out of pills? When to call for refills?
- What other medications that you take help your diabetes? Kidneys? Cholesterol? Heart?
- What about insulin? Do people on insulin ever need to adjust their dose?
- If you use insulin, how do you store it?
- Can some people take insulin and then stop taking it? Does taking insulin mean that you need it for life?

Activity- choose one per session (30 minutes)

- Medication check – Bring in all your medications (NO CONTROLLED SUBSTANCES) in the bag or box that you store them in at home.
- Pharm D Speaker- Diabetes Medications and how they work. Understanding what other medications help your diabetes.
- Drawing up Insulin- Hands on Workshop
- Associating medications with health and wellness versus disease: Adding affirmations to pill bottles.
- Let go of your Fear of insulin Video (5 minutes): <http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=programsSDPIIdeasInspirations>
-

Taking Action: Goals for Taking Medication (15 minutes)

- What do I want to change so that I take my medications better? How will I make this change? When will I make the change? How often will I make this change? How confident are I that I can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.

Take Aways (5 minutes?) Also on the epic dot phrase for the AVS for each visit.

- Always take your medication as prescribed: do not miss doses, take extra doses or stop taking your medication without talking to your primary care provider
- If your blood sugar is high, taking an extra “pill” will not make it lower
- Your medications are helping you have normal blood sugar levels. If your levels are low, make sure you are eating regularly, especially before exercise.
- Call the pharmacy for refills on your medication before you call the clinic and before you run out of pills
- Lisinopril, or other medications in the drug class “ACE or ARB” can be used for blood pressure control. These medications are used in diabetes because they are kidney protective
- People with diabetes need insulin either 1.) When their pancreas can no longer make insulin itself, or 2.) When their blood sugar levels are so high (glucotoxicity) that the body needs a little help to bring the levels down. It is possible to be on insulin for a short time and then stop taking once your glucose levels are better controlled.

Module V: Problem Solving

Myths: Let's bust them! (15 minutes)

- Being sweaty, dizzy or weak are all signs that my blood sugar may be too low
- If my blood sugar is low, it is best to eat a candy bar or drink a soda to get it up again
- If I feel thirsty, tired, am peeing a lot, or have a dry mouth these may be signs that my blood sugar is too low
- If I have a slight ingrown toenail it is okay to clip it at home if I'm very careful
- I have a bad cut or an injury to my foot. It is okay to wait a few days to call the clinic for an appointment
- People with diabetes are more likely to get urinary tract infections
- People with diabetes should get extra vaccines to prevent complications

Talking Points (15 minutes)

- What makes blood sugar high? What makes it low?
- What does it feel like to have your blood sugar too high or too low? Can it be dangerous?
- What are good foot care practices at home? What should be avoided?
- What are signs of a urinary tract infection, why are people with diabetes more likely to have these problems?
- Has anyone had a foot, toe or leg amputation or known anyone that has?
- What vaccines are important, especially for people with diabetes?

Activity- choose one per session (30 minutes)

- Monofilament foot exams
- Shoes and insoles
- Recognizing hypo and hyperglycemia (videos)

Taking Action: Problem Solving Goals (15 minutes)

- What do you want to change in your diabetes care to better problem solve when problems come up? How will you make this change? How often will you make this change (example: check feet every night before bed, see a podiatrist once per year, get immunizations, etc.). How will you know your goals have been met (example: no foot complications, no hyperglycemia symptoms, no UTIs, etc.). How confident are you that you can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.
- **Take Aways** (5 minutes?) Also on the epic dot phrase for the AVS for each visit.
 - If you get low- you only need 4 ounces of juice (not a whole glass, or a whole candy bar) – recheck every 15 minutes until your blood sugar is normal again
 - Keep glucose tabs with you at all times (especially if you take insulin)
 - Have a podiatrist, doctor or provider remove ingrown toenail.
 - Don't wait until it's too late! Call or come to clinic for an assessment immediately after a foot injury
 - Have your feet checked at least once a year by a Podiatrist for feeling loss, neuropathy or microvascular disease
 - Talk to your doctor or provider about what immunizations you may need, including: flu, pneumococcal, Tdap, Shingles (60+ years old only) and Hepatitis B.

Module VI: Reducing Risks**Myths: Let's bust them!** (15 minutes)

- Diabetes is a one way street to bad health problems

- Diabetes can affect (choose all that apply): heart and blood vessels, eyes, nerves, kidneys, teeth and gums, feet, sexual function
- If my blood pressure is a little high it shouldn't affect my diabetes too much
- I only need to see my eye doctor every 1-2 years for a dilated eye exam
- It's okay to go a year or two between seeing a dentist

Talking Points (15 minutes)

- What is the best way to prevent complications?
- How does diabetes affect blood vessels?
- Why does blood pressure make such a big difference in overall health in diabetes?
- How can diabetes affect the eyes?
- Why would I need a urine test to check how my diabetes is doing?

Activity- choose one per session (30 minutes)

- Dental Hygienist Speaker

Taking Action: Reducing Risks Action Plan (15 minutes)

- What do you want to change in your life so you can better manage your diabetes and prevent risks or complications? How will you change this? When will you make the change? How many times per day, week, month or year will you make this change? How confident are you that you can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.

Take Aways (5 minutes?) Also on the epic dot phrase for the AVS for each visit.

- Through good diabetes management and follow up, you can maintain your health
- Diabetes can affect your heart, blood vessels, eyes, nerves, kidneys, teeth & gums, feet, sexual function and emotional health
- Stay up to date with health care appointments to check the ABC's (HbA1c, Blood pressure and cholesterol).
- See an eye doctor every year to check for eye problems like retinopathy
- See a podiatrist for a complete foot exam once per year and follow up with your doctor or provider right away if you develop any cuts or sores on your feet
- See a dentist every 6 months because teeth and gum issues contribute to high blood sugar levels
- Talk to your doctor or provider about quitting smoking.

Module VII: Healthy Coping**Myths: Let's bust them!** (15 minutes)

- Positive thinking can improve the way I manage my diabetes and improve my health
- It is important to do something I enjoy everyday
- People with diabetes or other chronic health problems are more likely to be depressed
- It is hard to recognize successes when times are tough
- Nobody wants to hear about my problems. When I feel down it is best to keep it to myself

Talking Points (15 minutes)

- How does positive thinking change things in your life and improve your health?
- What things in your life bring you joy? Do you do them everyday?
- Have you ever struggled with depression? Is this common? Do people talk about depression? Who would tell if you thought you were depressed?

- What are some success stories in your life? What have you done to improve your health (no matter how big or how small).
- What is your support group? Family, Friends, Religion, Spirituality? Have you attended support group for people with diabetes? Would that help?

Activity- choose one per session (30 minutes)

- Mindfulness Speaker

Taking Action: Emotional Health (15 minutes)

- What do you want to change in your life to improve your emotional health or coping? How will you change this? When will you make the change? How often will you make this change? How confident are you that you can meet this goal (0-10). Must be confident at a 7/10 or higher to proceed with goal.

Take Aways (5 minutes?) Also on the epic dot phrase for the AVS for each visit.

- Diabetes can be very challenging and make people feel isolated or alone
- Attending support groups or finding people that you can rely on is helpful!
- Do something you enjoy everyday, no matter how big or small the activity
- Remember your successes when you are having a bad or challenging day
- You are not in this alone! Talk to your doctor or provider if you think you are suffering from depression

Appendix B

Empowerment Diabetes Group Forms

Patient Goal Sheets per session

1. Healthy Eating

Taking Action: Meal Plan/Goals

What, How, When, How Often, How Confident

WHAT is my goal? What do I want to change?

HOW will I make this change? (For example, think about how much of certain foods you will include in your diet, or what foods you will cut out).

WHEN will I make these changes? : (What time of day? Meal of the day? Day of the week?)

HOW OFTEN will I make this change? (How many times per day? Week? Month?

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

2. Being Active

Taking Action: Exercise

What, How, When, How Often, How Confident

WHAT is my goal? What do I want to change?

HOW will I make this change? (For example, think about how much of certain foods you will include in your diet, or what foods you will cut out).

WHEN will I make these changes? : (What time of day? Meal of the day? Day of the week?)

HOW OFTEN will I make this change? (How many times per day? Week? Month?

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

3. Taking Medication

Taking Action: Medication Goals

What, How, When, How Often, How Confident

WHAT is my goal? How do I want to change the way I take my medicines?

HOW will I make this change? (For example, think about any medication doses you have been missing or troubles with medication refills or even your relationship with taking your medications).

WHEN will I make these changes? : (What time of day will you take meds? When will you initiate refills? Etc.)

HOW OFTEN will I make this change? (How many times per day? Week? Month?)

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

4. Problem Solving

Taking Action: Problem Solving Goals **What, How, When, How Often, How Confident**

WHAT is my goal? What do I want to change in my diabetes management plan?

HOW will I make this change? (For example, think about what makes your blood sugar high or low and how you might notice this. Do you need to monitor your sugars more often to realize if you're high or low? Also, how do you manage foot care?).

WHEN will I make these changes? : (What time of day? Day of the week?)

HOW OFTEN will I make this change? (How many times per day? Week? Month?)

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

5. Reducing Risks

Taking Action: Reducing Risks **What, How, When, How Often, How Confident**

WHAT is my goal? What do I want to change?

HOW will I make this change? (For example, do I need to keep up with my preventative screenings more? Lab tests? Visits with specialists? Changes in my behavior or self-management?).

WHEN will I make these changes? : (What tests? What specialists? Etc.)

HOW OFTEN will I make this change? (How many times per day? Week? Month? Year?)

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

6. Healthy Coping

Taking Action: Healthy Coping Goals
What, How, When, How Often, How Confident

WHAT is my goal? What do I want to change in the way I cope?

HOW will I make this change? (For example, do I need to spend more time with family? Outdoors? Exercising? With a counselor? Doing art? Etc.).

WHEN will I make these changes? : (What time of day? Day of the week?

HOW OFTEN will I make this change? (is this something I want to do many times a day? Once a day? Once a week? Etc.)

HOW CONFIDENT am I that I can make this change? Are you confident at least a 7/10 that you can make this change? 0 means not confident and 10 means extremely confident. If not, change your goal to make it more realistic.

Appendix C
Empowerment Diabetes Group Provider Resources

1. Sample Flier

“Come and join Dr. Karen Sauer in an interactive group all about diabetes empowerment and education.

Learn new ways to stay active, eat healthy, live better and reduce your risks by participating in activities with others.

Dr. Sauer will be able to answer your questions and help you meet your health care goals”

2. Provider PowerPoint

(See attachment)

3. Epic Dot Phrases

Module I: Healthy Eating

AVS dot phrase for EPIC

- Start with small goals I am confident I can achieve
- Try new things when it comes to food
- Eat fresh! Fill up on healthy fruits and veggies rather than carbs
- Don't go too long without eating, and remember small frequent meals are best
- Shop fresh! Choose whole grains, lean meats, fruits and vegetables (outer aisles of the grocery store)

Module II: Being Active

AVS dot phrase for EPIC

- Start slow! 5 minutes of exercise is better than none!
- Walking counts!
- Good shoes matter
- Involve your family, friends, or pet and be accountable to each other.
- Walk indoors or gear up in bad weather
- La Clinica offers affordable classes: Zumba, Yoga as well as Group Visits: 5 K group
- Check blood sugar before and after exercise
- Eat a carb and protein snack before you exercise

Module III: Monitoring

AVS dot phrase for EPIC

- The ABC's of Diabetes Monitoring are: A: A1c (or HgA1c); B: Blood pressure and C: Cholesterol.
- Check HgA1c every 3- 6 months based on your individualized diabetes care plan (There is no need to check more often than 3 months).
- Check blood pressure in clinic or at home based on your individualized diabetes care plan. (It is usually not necessary to check your blood pressure everyday).
- Check cholesterol based on your doctor or provider's recommendation. In general, you should not go more than 6 months without having your cholesterol checked.
- Morning, or fasting blood sugar levels change based on what you eat the night before.
- The Dawn Phenomenon happens to all people whether or not they have diabetes. This means that blood sugar levels increase during the night or early morning. For people with diabetes, their body can't compensate for the increased levels as well.

This is why we recommend checking early morning blood sugars, to monitor how your body handles the “dawn phenomenon”.

- The best times to check your blood pressure include: 1.) Fasting (Before breakfast), 2.) Postprandial (2 hours after eating) and 3.) Before bed in the evening. Right after you eat a meal is not a good time to check your blood sugar.
- Remember to check your blood pressure if you are feeling sick!

Module IV: Taking Medication

AVS dot phrase for EPIC

- Always take your medication as prescribed: do not miss doses, take extra doses or stop taking your medication without talking to your primary care provider
- If your blood sugar is high, taking an extra “pill” will not make it lower
- Your medications are helping you have normal blood sugar levels. If your levels are low, make sure you are eating regularly, especially before exercise.
- Call the pharmacy for refills on your medication before you call the clinic and before you run out of pills
- Lisinopril, or other medications in the drug class “ACE or ARB” can be used for blood pressure control. These medications are used in diabetes because they are kidney protective
- People with diabetes need insulin either 1.) When their pancreas can no longer make insulin itself, or 2.) When their blood sugar levels are so high (glucotoxicity) that the body needs a little help to bring the levels down. It is possible to be on insulin for a short time and then stop taking once your glucose levels are better controlled.

Module V: Problem Solving

AVS dot phrase for EPIC

- If you get low- you only need 4 ounces of juice (not a whole glass, or a whole candy bar) – recheck every 15 minutes until your blood sugar is normal again
- Keep glucose tabs with you at all times (especially if you take insulin)
- Have a podiatrist, doctor or provider remove ingrown toenail.
- Don’t wait until it’s too late! Call or come to clinic for an assessment immediately after a foot injury
- Have your feet checked at least once a year by a Podiatrist for feeling loss, neuropathy or microvascular disease
- Talk to your doctor or provider about what immunizations you may need, including: flu, pneumococcal, Tdap, Shingles (60+ years old only) and Hepatitis B.

Module VI: Reducing Risks

AVS dot phrase for EPIC

- Through good diabetes management and follow up, you can maintain your health
- Diabetes can affect your heart, blood vessels, eyes, nerves, kidneys, teeth & gums, feet, sexual function and emotional health
- Stay up to date with health care appointments to check the ABC’s (HgA1c, Blood pressure and cholesterol).
- See an eye doctor every year to check for eye problems like retinopathy
- See a podiatrist for a complete foot exam once per year and follow up with your doctor or provider right away if you develop any cuts or sores on your feet

- See a dentist every 6 months because teeth and gum issues contribute to high blood sugar levels
- Talk to your doctor or provider about quitting smoking.

Module VII: Healthy Coping**AVS dot phrase for EPIC**

- Diabetes can be very challenging and make people feel isolated or alone
- Attending support groups or finding people that you can rely on is helpful!
- Do something you enjoy everyday, no matter how big or small the activity
- Remember your successes when you are having a bad or challenging day
- You are not in this alone! Talk to your doctor or provider if you think you are suffering from depression

Appendix D**Empowerment Diabetes Group Proposal****GROUP VISIT PROPOSAL TEMPLATE**

| | |
|---|--|
| GROUP VISIT NAME: Diabetes Empowerment Group | Organizer: Karen Sauer, MD and Issa Sturm, FNP |
| What need does this group address? | Diabetes: Specifically a hands on engagement with education to address |

| | |
|--|--|
| | <p>clinical and behavioral health components affecting patients.</p> <p>Lifestyle interventions through diabetes self-management education (DSME) and diabetes self-management support (DSMS).</p> <p>Address rural health needs and barriers for the migrant worker populations with diabetes.</p> <p>Address needs of Spanish speaking populations through offering visits in both English and Spanish.</p> |
| <p>What is the goal of the group visit? List the AIM statement goals (specific, measurable goals for the group).</p> | <p>We aim to improve investment in optimal self-management of diabetes for all La Clinica patients, including the rural migrant worker populations, and Spanish speaking patients. We aim to address our patient's barriers to success and improve the following quantitative measures:</p> <ol style="list-style-type: none"> 1.) HgA1c $\leq 7\%$ 2.) Blood Pressure $< 130/80$ 3.) LDL < 100 4.) Average capillary blood glucose: $< 70-130$ (fasting) & < 180 (post-prandial) <p>Offer support and tools for diabetes wellness and self-management. Empower patients to set realistic goals and engage in problem solving. Assist patients in sustaining behavior changes through</p> |

| | |
|--|--|
| | <p>educational, psychosocial and clinical support. Address the following educational needs and qualitative measures:</p> <ol style="list-style-type: none">1.) Healthy eating: Design dietary modifications using balance variety, and moderation. Integrate cooking classes and/or shopping exercises. Referrals to Budget Gourmet Group.2.) Being Active: Introduce patients to wellness center services and community agency options. Increase patient tolerance to activity. Target: 30 minutes of physical activity per day, most days of the week. Referrals to Weight Loss Group and 5K Group.3.) Monitoring: Demonstrate how to accurately test blood glucose and maintain target glucose levels. Self-care actions for high and low blood sugar levels. Cholesterol and BP measurements.4.) Taking Medication: Compliance with medication regimens including correct administration of prescribed meds, barriers to prescription refills |
|--|--|

| | |
|--|---|
| | <p>and navigating the pharmacy. Insulin administration.</p> <p>5.) Problem Solving: Managing complications. Hypo- and hyperglycemia. Foot care. Sick day care.</p> <p>6.) Reducing Risks: Educate patients regarding the repercussions of untreated and/or suboptimal treatment of diabetes, including: heart, renal, ophthalmological and dental disease.</p> <p>7.) Healthy Coping: Assess and support positive psychosocial strengths. Discuss psychosocial aspects of living with diabetes. Patient goal setting and assess readiness for change. Referrals: Mindfulness Group.</p> |
| <p>How is this in alignment with other quality measures http://intranet:8080/display/SYS/CCO+Measure+Selection+Matrix http://intranet:8080/display/SYS/Clinical+Dashboard or the mission of La Clinica and the Wellness Strategic Plan (Attachment # 1)?</p> | <p>Improve the overall probability of successful HgA1c reduction in diabetic patients. Historically, there has been a low probability for success in this quality measure.</p> <p>Continue to improve the quality measure targets of hypertension and cholesterol control.</p> |
| <p>Who is the target population?</p> | <p>Those who are newly diagnosed with diabetes, and/or other diabetics with good or poor control. Rural populations, including migrant workers, who</p> |

| | |
|---|---|
| | historically have less access to medical care and poor diabetes control. Spanish speaking populations who struggle with language barriers. |
| Dates, times, meeting space? | Mondays 4:30 pm to 6 pm Start date: Monday April 18 th 2015 at Wellness Center Frequency of classes: weekly |
| Is your group curriculum based? If so, submit outline of curriculum. If not, submit structure of the group. | Group structure: 1.5 hours in length, weekly. 15 minutes for check in. Vital signs and CBGs will be assessed by patient with set up, process, monitoring and documentation by MA. Includes introduction to group visits. 15 minute Introduction and Welcome by Karen Sauer. Address group agreements and confidentiality briefly. 15 minutes check in round by Karen; MA may support by taking notes. 30 minute Talk Point/Sharing/Activity. One of the following topics per class, including: nutrition, fitness, monitoring, medications, reducing risks, problem solving, emotional health. 10 minute closing/goals by Karen. |
| Submit Quality Improvement data collection tool and evaluation tool OR work with Wellness Program Coordinator to develop measurement tools. | Quantitative Data: Capillary blood glucose, HgA1c, BP, LDL, BMI Qualitative Data: Diabetes Knowledge Test & Empowerment scales |
| What equipment or supplies are needed? | AV equipment, CBG & HgA1c supplies, BP cuffs, pedometers, scale and height measuring equipment, log books, chairs for each participant |
| Who are the Group Leaders (PCP, a content expert) or other support needed (MA, IBH, RN)? | Content expert: Karen Sauer, MD Ma: Yanneli DeLaTorre IBH: Chavala Bates |

| | |
|--|---|
| | Kim Caffrey, RN Various guest speakers |
| What is the billing structure – bill for every patient or only those that have one-on-one visit with provider? | Bill for every patient 99212. |
| If your group doesn't include a billing provider the billing order will be 99078 (smoking cessation and other preventative services). <u>Work with EMR specialist</u> to assign appropriate documentation and tracking of services. | |
| Financial Feasibility. Add cost of provider + cost of other leader + support staff + supplies. *Minimum number of patients needed to cover cost of the groups is 8-12. | Plan to aim for minimal enrollment of 8, increasing up to 15-20 as patients as interested |
| How do you plan to prevent drop-outs or address barriers to attendance? | This will be a recurring modular, but evolving curriculum in an area of high-interest. This means that patients can enroll any week, do not "fall behind" if they miss a session and can repeat topic areas of interest and need to continue to grow. |
| What possible risks could be associated to proceeding with this group? | <ol style="list-style-type: none"> 1.) Not enough patients sign up and there is financial loss 2.) HIPPA and confidentiality issues- patients must sign HIPPA releases. 3.) Organizational: LCDV staff unable to perform new roles 4.) Inappropriate content brought up during group visits that require redirecting. |
| Which people in the agency can best help support the success of this group? (e.g. marketing and recruitment plan, data collection, EPIC support) | Will utilize our complementary providers as they become available |
| Are there any holiday/vacation dates during your group? Please specify. | The visits should occur during regular business hours at the Wellness Center, unless predetermined that they |

| | |
|---|---------------------------------------|
| | will occur outside of business hours. |
| What's your back up plan for unexpected absence? (e.g. sick day). Notify site coordinator and Wellness Program Coordinator of any changes /cancellations. | Recruit Justin Adams or Matt Hogge. |
| Other: | n/a |

Appendix E

Empowerment Diabetes Provider Training/Education

Pre and Post Test



EMPOWERMENT DIABETES GROUP PRE-TEST



Please answer the questions based on your previous understanding of group visits.

TRUE/FALSE:

- 1.) Group diabetes visits are primarily for patients with uncontrolled status? T/ F
- 2.) In a study, 100% of patients recommended group visits to other patients T/ F
- 3.) A large part of group visits is the didactic portion, whereby the provider stands in front of the group and provides education on a given topic. T/F
- 4.) Group Diabetes visits replace the need for standard OV for diabetes care T / F
- 5.) Empowerment based approaches to diabetes care improve medication compliance and self-care behaviors, but not quantitative measures like HgA1C or cholesterol T / F



EMPOWERMENT DIABETES GROUP



POST-TEST

Please answer the questions based on your previous understanding of group visits.

TRUE/FALSE:

- 1.) Group diabetes visits are primarily for patients with uncontrolled status? T/ F
- 2.) In a study, 100% of patients recommended group visits to other patients T/ F
- 3.) A large part of group visits is the didactic portion, whereby the provider stands in front of the group and provides education on a given topic. T/F
- 4.) Group Diabetes visits replace the need for standard OV for diabetes care T / F
- 5.) Empowerment based approaches to diabetes care improve medication compliance and self-care behaviors, but not quantitative measures like HgA1C or cholesterol T / F

Appendix F


Empowerment Diabetes Provider Training/Education

Provider Training/Education PowerPoint



Empowerment Diabetes Group

@ La Clinica's Wellness Center
Mondays: 3:45-5:15
START DATE: April 18, 2016
Karen Sauer, MD



Before we start..



- * Issa Sturm, FNP & Doctoral Candidate at OHSU
- * Partnering with Karen Sauer & Justin Adams to create an **evidence based curriculum**– and approach– to Group Diabetes Visits
- * Pre & Post “Test”/Questionnaire to assess efficacy of this presentation
- * Thank You! for your participation. Please feel free to email me with any specific questions about my doctoral project: sturm@ohsu.edu

Empowerment Diabetes Group

Presentation Outline



- * Group Visit Ethos / Benefits of Group Visits
- * Weekly Group Topics & Activities
- * Measuring Success
- * Referring your patients **
- * Communication with PCP
- * Post Test
- * Questions

Group Visit Ethos



- * A hands on engagement with education to address clinical and behavioral health components affecting Patients



- * Focus on empowerment & self-efficacy
- * Peer support: Instrumental in lifestyle & behavioral changes (Burke & O'Grady, 2012; Siwik et al., 2012).

hmc.comm.fsu.edu

Group Visit Ethos



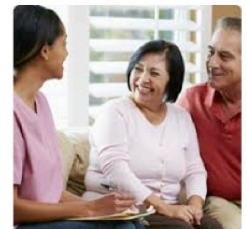
- * Evidence Based
- * Self management (DSME & DSMS) cornerstone to good diabetes care
- * Whole person approach: physical, medical, educational, social and psychological support
- * Healthcare Provider as advocate
 - * Belief in patient capacity for change
 - * Therapeutic Communication/ MI



Benefits of Group Visits



- * Successful reduction of:
 - * HgA1c, cholesterol, BP (Ridge, 2012; Cohen et al., 2011).
 - * Morbidity and mortality (Simmons & Kapustin, 2011).
- * Improvement in:
 - * Knowledge, quality of life, problem solving skills (Ridge, 2012).
 - * Patient satisfaction (Cohen et al., 2011).



<http://www.diabeteseducator.org>

Weekly Group Topics: Discussion



- * Healthy Eating
- * Being Active
- * Monitoring
- * Taking Medications
- * Reducing Risks
- * Healthy Coping



calgary.worldhealth.ca

(AADE, 2010).

Activities: Hands on Engagement



- * **Healthy Eating** – mobile pantry, food labels, demonstration kitchen, Veggie Rx
- * **Being Active** – Gentle stretching, chair exercise, short group walk
- * **Monitoring**– glucometer training, insulin injection, log books
- * **Taking Medications**– navigating the pharmacy, prescription refills
- * **Reducing Risks**– engagement with risks
- * **Healthy Coping** – mindfulness activities



Please email thoughts or suggestions: sturm@ohsu.edu

www.diabetesprevention.pitt.edu

Referring your patients **



- * Evidence shows that referrals are amongst the top barriers to the success of Group Diabetes Visits (Dantje & Forrest, 2011).
- * All La Clinica patients welcome! (Newly diagnosed, controlled and uncontrolled diabetes, and pre-diabetes).



alterrealtygroup.comcom

In basket: Sa 30 WC Group Visit Pool

1: click

2: type

3: select

4: accept

Communication with PCP



- * Empowerment diabetes group intention: provide education and foster self-management and peer support
 - * Medical intervention will be minimal (reserved for urgent/emergent situations)
 - * In basket messages – forwarding encounter
 - * Patient goals entered in EPIC
 - * “A goal without a plan is just a wish”
- Antoine de Saint Exupery



www.bitrix24.com

Measures of Success



- * Quantitative
 - * $HgA_{1c} \leq 7\%$
 - * Blood Pressure $< 130/80$
 - * LDL < 100
 - * Average CPG $< 70-130$ (fasting) & < 180 post prandial



(Livinghealthylife.com, 2013).

Measures of Success



- * Qualitative
 - * Informal measures
 - * Patient satisfaction
 - * Patient participation
 - * Validated Scales
 - * Diabetes Empowerment
 - * Self-Care behaviors
 - * Diabetes knowledge
 - * Medication adherence



(Hernandez-Tejada et al. 2012)

twitter.com

Closing Thoughts



- * Overall, participants benefit!
- * 100% of patients recommend diabetes group visits to others (Dantje & Forrest, 2011)
- * Innovative teaching modalities
- * Interactive discussions



<http://www.diabeteseducator.org>

Questions?

