Innovation in an Emerging Field: Primary Care Dietetics

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An Untouched Field
Primary care, a crucial location for diabetes and chronic disease management, as well as health care transformation is an evolving area of practice for registered dietitian nutritionists (RDNs). However, in the most recent Compensation and Benefits Survey from the Academy of Nutrition and Dietetics, only 5% of respondents identified as a general outpatient dietitian, the category most likely to capture primary care RDNs (1). The scale of missed opportunity in the field is staggering: of the 1 billion physician visits conducted each year, more than 50% occur in the primary care setting (2). Primary care is a patient’s home base in the medical system, delivering comprehensive care for the whole person across the lifespan. Because chronic diseases are managed in primary care and chronic diseases are responsible for 70% of deaths each year and 86% of the nation’s health care costs, this is where new health care models and initiatives are focusing (3). The goals of this article are to spark interest and spur action by RDNs to take advantage of this opportunity and to provide an example of a successful model in primary care dietetics.

Primary Care Dietetics: Frontline Care
With financial incentives to improving health outcomes, containing costs, and increasing patient and clinician satisfaction, many primary care practices are seeking accreditation as patient-centered medical homes (PCMHs) to help reach these goals. In contrast to traditional primary care clinics, PCMHs are held to specific national standards of improved access to services, population management, and patient-centered care. As nutrition experts, RDNs have unique qualifications to assist professionals in primary care settings in accomplishing these measures as part of an expanded, multidisciplinary care team.

Research shows that most patients who could benefit from nutrition counseling do not receive it. Most primary care clinicians lack the time to offer adequate counseling, with acute concerns often outweighing chronic care management in the already short appointments that average only 16 to 18 minutes (4). Fewer than 45% of primary care visits by adults with nutrition-related conditions such as hyperlipidemia, hypertension, obesity, and diabetes include diet counseling (4). Additionally, physicians’ poor self-efficacy and lack of training in nutrition and behavior change is a barrier to such counseling. A national survey indicated that medical students receive only about 20 hours of nutrition instruction in their medical school careers (5). Primary care dietetics seeks to fill this void by placing RDNs in a location desperate for practitioners skilled in nutrition and behavioral counseling.
A Successful Primary Care Dietetics Model

The primary care nutrition services program at Yakima Valley Farm Workers Clinic (YVFWC) in Oregon and Washington exemplifies the emerging opportunities for RDNs in primary care since enactment of the ACA, specifically in community health centers and Federally Qualified Health Centers. As the largest community-based health center in the Pacific Northwest, YVFWC encompasses 19 clinics across the two states. Nearly 75% of the population served is at 100% or below the federal poverty level and 50% have a primary language other than English. Through the course of implementing an innovative model that successfully addresses critical organizational measures, YVFWC has nearly tripled RDN staffing to 15 RDNs (Fig.). In addition to providing medical nutrition therapy and chronic disease management, RDNs in the YVFWC model focus on disease prevention and addressing social determinants of health by working on multidisciplinary teams and collaborating with community partners.

Table 1 compares the typical outpatient nutrition model of care to the YVFWC nutrition model of care. The YVFWC model emphasizes same-day access to services and making contact with patients as part of their regular primary care provider clinic visit, in what is termed a “warm hand-off” appointment. Modeled after innovative behavioral health models of primary care integration, the warm hand-off minimizes obstacles to care and creates a more seamless flow, with the RDN counseling the patient immediately before or after the primary provider visit. Brief 15-minute visits are conducted for acute nutrition concerns as well as chronic disease management and prevention. The RDN uses motivational interviewing to provide patient-centered care that focuses on realistic, patient-determined goals rather than following a prescribed nutrition intervention. RDN availability for warm hand-offs and, therefore, increased access to patients is made possible by minimizing prescheduled appointments and keeping visits brief. With 80% of nutrition visits occurring on the same day as the primary care provider appointment, most patients, many of whom struggle with transportation barriers, have their immediate needs met at one time in

<table>
<thead>
<tr>
<th>RDN Availability</th>
<th>Typical Outpatient Nutrition Model of Care</th>
<th>Yakima Valley Farm Workers Clinic Nutrition Model of Care</th>
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<tbody>
<tr>
<td>Accessibility</td>
<td>Long wait for appointments, most urgent only</td>
<td>Same-day access</td>
</tr>
<tr>
<td>Appointment Type</td>
<td>Scheduled</td>
<td>Warm hand-off</td>
</tr>
<tr>
<td>Counseling Style</td>
<td>Extensive, involved</td>
<td>Brief, motivational interviewing</td>
</tr>
<tr>
<td>Appointment Length</td>
<td>60 minutes</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Productivity</td>
<td>8 patients per day</td>
<td>15 patients per day</td>
</tr>
<tr>
<td>Referrals</td>
<td>By clinician, most urgent patients, reactive</td>
<td>Not clinician-dependent, proactive</td>
</tr>
<tr>
<td>RDN Integration</td>
<td>Little or nonexistent; separate office space</td>
<td>Colocated, participation in clinic meetings/activities</td>
</tr>
<tr>
<td>Billing</td>
<td>Fee for service</td>
<td>No fee (RDN services are incorporated in the primary care model)</td>
</tr>
</tbody>
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RDN=registered dietitian nutritionist
one location. Furthermore, with so few prescheduled visits, the program is no longer negatively affected by high no-show rates that are common in underserved populations.

“Warm hand-offs allow patients to move seamlessly from providers to RDNs for same-day service when a need is identified.”

This model requires flexibility and initiative on the part of the RDN to make same-day visits efficient and feasible for patients and the medical team. The RDN is collocated with the medical team for easy access and improved communication. Referrals are not clinician-dependent or reserved for only the most urgent cases. Instead, potential patients are identified to see the RDN via the Dietitian Opportunities Report, a report created in the electronic health record (EHR) to identify same-day patients with a nutrition-related condition or preventive type visit, such as a well-child check. Patients are also identified through care team huddles, screens, registries, or a pre-visit prep feature in the EHR. The pre-visit prep function allows any care team member to set a reminder on the provider schedule for the patient to see the RDN. With fewer barriers to services and proactive patient identification, this model allows for more patients to be seen by the RDN, maximizing productivity. Future follow-up appointments via warm hand-offs or scheduled appointments are encouraged to support the patient in behavior change and improved health outcomes. Visits are conducted with any patient as many times as needed by a variety of methods, including individual appointments, phone consultations, group visits, and classes.

Providing services free of charge affords the YVFWC program flexibility in creating a model that meets its population’s and providers’ needs. It is not constrained by the typical system of reimbursement, which often restricts the type and duration of RDN visits. The value added through better patient outcomes, such as improving hemoglobin A1c (HbA1c), and patient and provider satisfaction help the organization in meeting quality metrics that, in turn, increase reimbursement under new payment models.

Another unique aspect of the YVFWC model is RDN engagement with community health efforts. Part of whole-person care is recognizing that several factors, many of which are outside clinic walls, affect a person’s health. Accordingly, creating community partnerships is crucial to improving health. The RDN can make a positive impact outside clinic walls with grocery store tours, nutrition classes, health fairs, school presentations, and media outreach (radio, television, and newspaper). The program is also exploring interdepartmental collaborations. For example, RDNs are partnering with one dental clinic location to provide nutrition and oral health phone consultations to pediatric dental patients at high risk for dental caries.

Additionally, the YVFWC program has piloted food insecurity screening and interventions and is now partnering with the Oregon Food Bank to design an intervention for food-insecure patients with diabetes via health and behavioral outcome tracking. The YVFWC primary care nutrition services program continues to explore new service delivery methods, such as group visits, cooking classes in new clinic kitchens, community gardens, and more.

Diabetes Self-Management

The integrated, flexible model at YVFWC increases the ability of RDNs in the primary care nutrition services program to assist in organizational efforts directed at meeting important measures for PCMH accreditation and ultimately demonstrate new value of the RDNs. As part of the organization’s initial PCMH accreditation, annual diabetes self-management visits were required for all patients with type 2 diabetes. RDNs were already completing warm hand-off visits for patients with diabetes. YVFWC leadership recognized the impact of these visits and determined the RDN to be the best choice to take the lead on satisfying this measure. A system-wide self-management template was created in the EHR and is completed by the RDNs to document key self-management components being tracked, including patient barriers and motivators, self-management education, and patient-set goals. These changes ultimately helped justify full-time RDN positions as well as an increase in the RDN staff at clinics not currently staffed by any RDN.

Table 2 provides an example of RDN impact on YVFWC’s diabetes self-
management goals. Yakima Medical Clinic started with a single part-time RDN at the beginning of the PCMH accreditation period. The clinic was not reaching the goal to complete self-management visits for at least 50% of the patient population with diabetes. When the RDN position expanded to full-time, the goal was quickly met and exceeded. This trend occurred across many of the YVFWC clinics as clinic administrators advocated for additional RDN staff to help reach these goals. Presently, the RDN team completes approximately 80% of the self-management visits for patients with diabetes.

In addition to completing diabetes self-management visits, the RDNs have been involved in targeted, multidisciplinary diabetes interventions using the diabetes registry, a computerized database with health information about all patients in the population with diabetes. In one intervention at the Yakima Medical Clinic, a subset of patients is identified with HbA1c values greater than 12%. The patients are contacted to schedule appointments with care team members, including the RDN, and each team member addresses different aspects of self-management and medical management. Monthly phone follow-ups are completed by the Registered Nurse to reinforce lifestyle changes, and subsequent RDN appointments are scheduled to continue support for patient self-management goals. Preliminary data indicate a preintervention average HbA1c of 13% and an average follow-up HbA1c of 10.9%, demonstrating improved outcomes, even for this most complex segment of the population. These are examples showing the impact of primary care RDNs, not in terms of direct reimbursement, but in terms of assisting in attaining goals that are valuable to the organization.

Moving Forward

With new reimbursement models relying on documented improved quality measures, RDN value and impact must be recorded through outcome reports. Moving forward, health outcomes, patient-reported behavior change, patient satisfaction, and cost savings related to the work of the YVFWC primary care nutrition services team will be tracked. For example, making an impact on patient HbA1c levels represents tremendous health care savings and increased reimbursement for organizations as well as a healthier population. Additional cost-savings may be shown as value-based reimbursement models allow the RDN, rather than the primary care provider, to see patients at periodic follow-up appointments.

The current focus on innovation and value-based payment models in primary care presents an enormous opportunity for RDNs to integrate into primary care by showing value in new ways. The time is now to take

Table 2. RDN Impact on Completion of PCMH Self-Management Visits

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<tr>
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<th>October 2013</th>
<th>December 2013</th>
<th>March 2014</th>
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<tr>
<td>RDN employment at Yakima Medical</td>
<td>Half-time</td>
<td>Full-time</td>
<td>Full-time</td>
</tr>
<tr>
<td>Rate of completed self-management visits at Yakima Medical</td>
<td>15%</td>
<td>50%</td>
<td>73%</td>
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PCMH=patient-centered medical home, RDN=registered dietitian nutritionist
action while the health care landscape is still flexible to changes in structure. We urge others to take action in advocating for RDNs on the primary care team and to join in efforts to explore effective nutrition delivery systems.

References

**A New Model to Increase Access to Diabetes Education: Partner and Train Primary Care Staff**

Maureen Chomko, RDN, CDE

**Problem:**
Lack of access to local, accredited diabetes self-management education (DSME) programs is a barrier for patients who live a long distance from urban medical centers.

**Goal:**
To increase patients’ access to DSME at University of Washington Medical Center Endocrine and Diabetes Center.

**Approach:**
An urban medical center’s Certified Diabetes Educators served as mentors and trainers for a primary care registered dietitian nutritionist (RDN) and staff in developing a customized 6-hour DSME program for our primary care center. The primary care RDN functioned as the program facilitator and billing provider for DSME. The program targeted patients who had hemoglobin A1c (HbA1c) values of equal to or greater than 9%. To evaluate program effectiveness, pre- and postclass HbA1c, weight, and diabetes knowledge information was collected. This program was introduced as our primary care clinic system was becoming an Accountable Care Organization; part of the initiative of the transition was to build innovative clinical programs for diabetes and obesity.

**Outcomes:**
In the first 9 months of the program, 64 patients (average seven patients per class) participated, with 57% attending all three classes, 27% attending two classes, and 16% attending only one class. On average, participants had a significant 1.1% reduction in A1c $P<0.00001$, as well as a significant 1.6-kg weight loss $P<.01$.

Participants had knowledge gains, as documented in their pre- versus postclass assessments, and indicated satisfaction with the program. Presenting our quantitative results to the organization stakeholders, we proved that this program was high-quality and evidence-based. Subsequently, the program has expanded to two additional primary care clinics within our system.

**Lessons Learned:**
Although standard DSME comprises 10 hours, this 6-hour program was effective (1). Maintaining referrals is essential and requires a fully committed team, including:

- A primary care “physician champion” who recommended the education series to patients and promoted it at staff meetings.
- Registered Nurses, who recommended the group education classes to their patients in their one-on-one interactions.
- A Health Navigator who assisted patients with community resources, attended the DSME class series to become familiar with the curriculum, and subsequently contacted patients with diabetes to discuss the program.

Finally, with RDNs devoting these hours to discussing diabetes self-care with patients, primary care providers can spend their time discussing patients’ acute care needs during time-limited office visits, thereby saving both provider time and health system costs.

**References**