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Funding Provided by

Diabetes Care and Education

 a dietetic practice group of the
Academy of Nutrition and Dietetics

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IDENTIFY

potential benefits of utilizing a telemedicine program in a rural community



DESCRIBE

at least 3 steps in implementing a facility-based medication protocol



DISCUSS

the benefits of utilizing multidisciplinary teams to maximum potential

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HeartBeat Connections Program

- Primary prevention program delivered as part of a 10 year research initiative
- High risk patients identified *proactively* from the medical record



Benson G, Sidebottom A, VanWormer JJ, Boucher JL, Stephens C, Krikava J. HeartBeat Connections: A Program Complementing Primary Care Integrated Within A Community-Based Initiative to Improve the Cardiovascular Health of a Rural Community. *Journal of the American Board of Family Medicine*. 2013; 26:299-310.

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HeartBeat Connections

Focused on optimizing major risk factors such as cholesterol, blood pressure, nutrition, exercise, and stress



→ Extension of Primary Care

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HeartBeat Connections Program

1 IN 3
ELIGIBLE PEOPLE
ENGAGE IN PROGRAM

30%↑ INCREASE
IN PARTICIPANTS MEETING
RECOMMENDED LEVEL OF
150 MINUTES PHYSICAL
ACTIVITY/WEEK

50%↓
DROP IN SMOKING
AMONG PARTICIPANTS

70% OF PARTICIPANTS
IMPROVED CHOLESTEROL

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HeartBeat Connections Program Impact

80% of our health is influenced by what happens outside the clinic walls



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Process for the Medication Protocol

Minnesota Statutes 148.634 PRESCRIPTION PROTOCOL

A licensed dietitian or licensed nutritionist may implement a protocol that does not reference a specific patient and results in a prescription of a legend drug that has been predetermined and delegated by a licensed practitioner as defined in section 151.01, subdivision 23, when caring for a patient whose condition falls within the protocol and the protocol specifies the circumstances under which the drug is to be prescribed or administered.

Minnesota Statute 2018 Minnesota Statutes 148.634 Prescription Protocol

www.revisor.mn.gov/statutes/cite/148.634

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Licensure and Medication Protocols

Idaho Statute 54-3502A

A licensed dietitian, in accordance with established protocols consistent with facility policy or procedure, may: (a) Order patient diets, including therapeutic diets; (b) Implement medical nutrition therapy; (c) Order medical laboratory tests related to nutritional therapeutic treatments; (d) Initiate, implement and adjust **pharmacotherapy** plans; and (e) Perform nutrition-focused physical assessments to evaluate for nutritional risk.

<https://legislature.idaho.gov/statutesrules/idstat/Title54/Chapter35/Section3502A/>

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Supporting Research

Performed a literature review of nurses and dietitians to support and inform facility leaders

- Dietitians implemented a telephone-based system to lower LDL cholesterol. LDL \leq 100 mg/dl improved from 34% to 61% (Robinson 2000)
- A dietitian-led lipid clinic achieved significant improvements in total cholesterol and triglycerides. (Worth and Davies 2006)

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Process for the Medication Protocol

- Presented findings to local medical center primary care group and gained consensus
- Formed an oversight committee to inform/refine policy

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Knowledge Is Power

Use data to build your case!

- 65% did not take daily aspirin
- Of those with LDL cholesterol \geq 100 mg/dL, 81% did not take a statin
- Of those with blood pressure \geq 140/90 mm/Hg, 56% did not take an anti-hypertensive medication.

= major untapped opportunity!

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Implement a Successful Medication Protocol

- Invite key stakeholders to serve on a committee to oversee the creation of the medication protocol
- **Collaborate with primary care!** Emphasize how you can support their relationship with the patient and help them overcome barriers
- Learn who ultimately needs to sign off on your protocol and how often it should be updated

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ENHANCED STUDY

DIETITIANS HELPING PATIENTS CARE FOR DIABETES

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Background/Rationale


DIETITIANS HELPING PATIENTS CARE FOR DIABETES

 Population


- ❖ A growing and aging population
- ❖ Increased prevalence of diabetes

 Health Care Reform

- ❖ Limited provider time
- ❖ Incentives for healthy populations

 Physician Shortage

- ❖ Projected 20,400 primary care physician shortage by 2020

 Change

- ❖ Opportunity to enhance current primary care prevention practices
- ❖ Collaborative team approach

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Design and Purpose

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- Study Design
 - ❖ Randomized Control Trial

- Study Objective
 - ❖ To investigate the efficacy of a RDN-led telemedicine program compared to compared with a control (usual care) group

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Background

DIETITIANS HELPING PATIENTS
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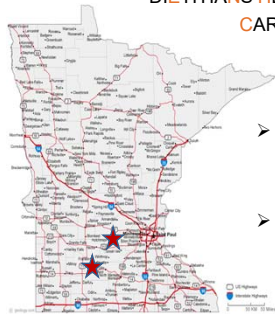
- Maintain blood glucose (A1c <8%)
- Manage blood pressure (<140/90)
- Be tobacco-free
- Take aspirin as recommended
- Take statin as recommended



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Site Selection

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➤ Hutchinson, MN

➤ New Ulm, MN

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Recruitment DIETITIANS HELPING PATIENTS
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❖ **Inclusion**

- Patients receiving primary care at Hutchinson Health or New Ulm Medical Center with 1+ clinic encounters in the previous 2 years
- Age 40-75 years
- Type 2 diabetes meeting 0-3 D5 measures

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Recruitment DIETITIANS HELPING PATIENTS
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❖ **Exclusion**

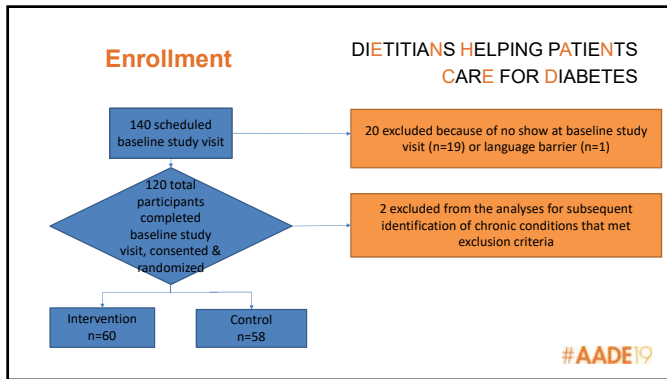
- Meeting 4 or more D5 measures
- Type 1 diabetes
- Stage 4+ chronic kidney disease
- Major cognitive or language barrier
- Active end-stage disease (cancer, pulmonary disease)
- Actively receiving cancer treatment
- Pregnancy

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All Participants DIETITIANS HELPING PATIENTS
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- **In-person baseline study visit (30-45 minutes)**
- Consent and randomization
- 5 minute consultation with study RDN to review optimal diabetes measures and received Type 2 Diabetes Basics booklet
- Results of diabetes measures mailed to home with optimal measures noted
- **In-person follow-up study visit at 1 year (30-45 minutes) - \$50 gift card**

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Study Approach – Intervention DIETITIANS HELPING PATIENTS
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- Telemedicine
- Individualized medical nutrition therapy
- Provider-approved medication protocol

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Results DIETITIANS HELPING PATIENTS
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- 108 participants completed the study (12% attrition)
- Intervention participants averaged 10 telemedicine sessions over 1 year

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Primary Outcomes

Primary outcomes	Intervention Group (baseline to follow-up)	Control Group (baseline to follow-up)	P Value
Optimal care goals (A1c, blood pressure, tobacco use)	Significant increase from mean of 3.1 → 3.7	Smaller increase from mean of 2.9 → 3.2	p=0.017*
Medication use for statin and aspirin	2.5 higher odds for statin 2.2 higher odds for aspirin		

*group-by-time interaction

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Secondary Outcomes

Secondary Outcomes	Intervention Group (baseline to follow-up)	Control Group (baseline to follow-up)	P Value
Daily servings of fruit	1.3 → 1.6	1.1 → 1.1	p=0.011*
Daily servings of whole grains	1.6 → 1.9	1.7 → 1.3	p=0.005
Taking medication as prescribed	57% → 75%	43% → 47%	OR=3.4 p=0.014
A1c level	8.1% → 7.4%	8.3% → 7.7%	

*group-by-time interaction

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Conclusion

- RDN-led intervention did as good or better on primary outcomes; significantly better on secondary (lifestyle) outcomes
- Telephonic coaching addressed the barriers of geographic inaccessibility and patient and provider time constraints
- Shared responsibility between PCPs and RDNs for diabetes care and self-management

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Take Away

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RDNs can effectively deliver both nutrition and medication therapies remotely via telephone in full complement to and coordination with clinic-based primary care

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RDN Scope of Practice

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- ❖ Order and monitor nutrition-related laboratory tests ... where an RDN has been granted ordering privileges or received a delegated order from a referring physician.
- ❖ Initiate, implement, and adjust protocol- or physician-order-driven nutrition related medication orders and pharmacotherapy plans in accordance with established policy or protocols consistent with organizational policy and procedure.

Academy Quality Management Committee. Academy of Nutrition and Dietetics: Revised 2017 scope of practice for the registered dietitian nutritionist. J Acad Nutr Diet. 2018;118(1).

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RDN Scope of Practice

**DIETITIANS HELPING PATIENTS
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Telemedicine

RDNs use electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health related education, public health, and health administration.

Academy Quality Management Committee. Academy of Nutrition and Dietetics: Revised 2017 scope of practice for the registered dietitian nutritionist. J Acad Nutr Diet. 2018;118(4).

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RDN Standards of Practice and Standards of Professional Performance DIETITIANS HELPING PATIENTS CARE FOR DIABETES

Guide for professionals to evaluate and improve practice

Competent has credentials to start practicing nutrition or is transitioning to diabetes care from another focus area

Proficient has 3 or more years of experience in diabetes care

Expert is recognized within the profession and has mastered the highest degree of skill and knowledge in diabetes care

Davidson P, Ross T, Castor C. Academy of Nutrition and Dietetics: Revised 2017 standards of practice and standards of professional performance for registered dietitian nutritionists (competent, proficient, and expert) in diabetes care. J Acad Nutr Diet. 2018;118(5): 932-946.

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Standards of Practice in Diabetes Care DIETITIANS HELPING PATIENTS CARE FOR DIABETES

- Implemented approved medication protocols to initiate and titrate diabetes medications and basic cardiovascular disease preventive medical regimens
- Ordered associated lab orders
- Addressed factors interfering with meeting diabetes goals (cost)
- Considered complex diabetes management issues related to food, changes in conditions and medication.

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Practice Implications DIETITIANS HELPING PATIENTS CARE FOR DIABETES

Collectively, research like this could be used to prompt a Medicare rule change that would allow RDNs to:

- Direct bill Part B for the new remote patient monitoring benefit
- Direct bill for the long-term care management benefit
- Allow MNT coverage for the diagnoses of hypertension and hyperlipidemia
- Allow RDNs to be "eligible clinicians" in the new Medicare Quality Payment Program.

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The ENHANCED Study Aligns with AADE Project Vision

- ❖ Offered convenient, accessible person-centered care by telephone
- ❖ Leveraged technology by using the EMR to identify eligible patients and communicate directly with clinic-based primary care
- ❖ Addressed related conditions—hypertension, dyslipidemia and heart disease
- ❖ Improved diabetes outcomes

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For More Information

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Questions?

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