

VALUE PATHWAY OF Diabetes Care & Education Specialists (DCES)

Framework for population health management, reducing therapeutic inertia, quality improvement and cost-effective care

Opportunity	Prediabetes	Diabetes Education >90% do not receive evidence-based diabetes self-management education and support	Diabetes and Cardiometabolic Care	Expanded Diabetes Management Teams	Healthcare Utilization: Reducing excess emergency department visits and hospitalizations	Lowering the Cost of Diabetes. \$327 billion US healthcare dollars spent annually
Process Indicated	Prevention or Delay of T2DM	Diabetes Self-Management Education and Support (DSMES) and DCES interventions	Person-Centered Diabetes Care Planning	Team-Based Care with DCES Integration	Acute and Post-Acute Diabetes Care and Education	Cost Savings and cost-effective interventions
Intervention Types	<p>Diabetes Prevention Program (DPP)</p> <ul style="list-style-type: none"> Intensive lifestyle coaching Medical Nutrition Therapy RDN/DCES Processes for sustained 7% weight loss 	<p>DSMES at the 4 critical times*</p> <ul style="list-style-type: none"> Patient education, counseling and/or training DCES and DSMES Consults Interdisciplinary care team <p>*at diagnosis, annually or when not meeting targets, when complications develop, when transitions in life or care occur</p>	<p>Integrated care w/DCES led interventions</p> <ul style="list-style-type: none"> Care management/ coordination and patient education Pharmacist/DCES-based health management RN/DCES assessments and interventions RDN/DCES Medical nutrition therapy Social determinants of health assessment & intervention Care team training & skill building Interdisciplinary quality improvement interventions <p>*Root cause analysis and strategies to overcome therapeutic inertia * Technology-enabled care delivery *Patient owned technology support</p>	<p>Empower nonphysician providers including DCES to initiate, intensify and de-intensify treatment independently, supported by appropriate guidelines</p> <ul style="list-style-type: none"> Provide team-based care to increase frequency and quality of patient engagement Evidence-based protocols and decision support tools to inform care delivery including treatment initiation and intensification <p>Referrals to DSMES and DCES</p> <ul style="list-style-type: none"> Referrals and auto-referrals for integrated care team Technology-enabled care 	<p>Care transitions and care management with DCES</p> <ul style="list-style-type: none"> Inpatient diabetes care and education specialist services Discharge support at care transitions Medication access and adherence support Care navigation post inpatient and ED discharge Clinical decision support tools 	<p>Assess value of diabetes interventions from cost benefit perspective Prioritize cost savings and cost-effective interventions:</p> <ul style="list-style-type: none"> DSMES vs usual care: \$5047/QALY (T2DM) Behavior change and medication taking \$2315/QALY (T1DM, T2DM) Integrated person-centered care \$11,339/QALY
Target Outcomes	<ul style="list-style-type: none"> Decreased incidence of T2DM 	<ul style="list-style-type: none"> Increased DSMES referrals and completed services * Improved health behavior changes and clinical outcomes Reduced/delayed complications Value-based payment models 	<ul style="list-style-type: none"> Achieve standards of diabetes care Improve clinical outcomes : A1C, BP, Cholesterol Patient engagement and patient reported outcomes (PROs) improved Reduced/delayed complications Value-based payment models 	<ul style="list-style-type: none"> Improved provider and care team engagement and satisfaction Improved patient satisfaction and engagement Improved therapeutic efficiency and outcomes 	<ul style="list-style-type: none"> Reduction in ER visits and hospitalizations, all-cause mortality, readmissions, LOS and cost of care Expanded outcomes and value -based payment options Foster horizontal and vertical care integration 	<ul style="list-style-type: none"> Prioritize cost savings and cost-effective interventions to manage diabetes: DSMES, behavior change and integrated care teams Reduce total cost of care
Rationale	T2DM may be prevented or delayed by evidence-based interventions	<ul style="list-style-type: none"> Increased quality of life, increased healthy coping, eating, activity, monitoring, medication taking, problem solving, risk reduction 	<ul style="list-style-type: none"> Achieving and maintaining BP, A1C and cholesterol targets reduces risk of macro and micro vascular complications Timely and cost-effective care 	<ul style="list-style-type: none"> Diabetes care delivery can lead to significant care team burden and negative impact on patient care *Overcoming inertia and improving glycemia helps achieve long term benefits for patients 	<ul style="list-style-type: none"> Acute care utilization is expensive Improving timely and cost-effective care improves quality care Sustained target glucose levels reduces health care costs Reduced emergency and inpatient services lowers Medicare and insurance claims Best practice treatment recommendations help Improve clinical outcomes, quality of life, and healthcare utilization 	<p>Effective and efficient diabetes care delivery improves health outcomes and reduces cost of care</p> <ul style="list-style-type: none"> Reduced emergency and inpatient services lower Medicare and insurance claims Improve clinical outcomes, quality of life, and healthcare utilization through cost effective, cost savings DSMES and DCES integrated care teams
References	4, 76, 77	6, 16, 49, 51	13, 23,26-31,35,36,40, 49, 57,58, 75	6, 25-28, 40, 49, 50	30-36, 40, 61, 62	16, 18, 30-37, 46,

KEY: (T1DM = Type 1 Diabetes; T2DM = Type 2 Diabetes *Diabetes Care & Education Specialists; DCES

**Diabetes self-management education and support: DSMES)