Implementing a Clinical Decision Support (CDS) Bundle for Diabetes Management: An Evidence Based Quality Improvement Project

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Background

- 30 million people in the United States are living with diabetes, the seventh leading cause of death in the nation.
- Diabetes is the leading cause of kidney disease, blindness, lower-limb amputations, heart disease, and stroke.
- Prevalence of diabetes has more than doubled since 1980.
- 25% of Veterans have a diagnosis of Type 2 Diabetes Mellitus (T2DM).
- Individuals can postpone T2DM by participating in an empowering behavior modification program known as diabetes self-management education (DSME). DSME is proven to reduce HgbA1c by 1%
- Only 5-7% of people appropriate for DSME were enrolled, partly due to lack of referrals

PICO

- For primary care providers (physicians, nurse practitioners, and physician assistants) at four VA clinics, does the implementation of a bundled evidence-based clinical decision support tool compared to current practice increase the number of consults placed to an evidence-based diabetes self-management education program (DSME)?

Evidence-Based initiative

Create an evidence-based clinical decision support (CDS) tool-order set bundle at the point of care containing all the recommended labs, orders, and consults – including the DSME - from the VA/DoD clinical practice guidelines for diabetes management.

- Delivers all evidence-based orders in one place by clicking one button!

Conceptual Framework

CLICK HERE

Assess barriers and supports

Monitor intervention and degree of use

Evaluate outcomes

Evidence-based innovation
- development process
- innovation attributes

Potential adopters
- awareness
- attitudes
- knowledge/still
- concerns
- current practice

Practice environment
- patients
- culture/social
- structural
- economic
- uncontrolled events

Implementation strategies
- barrier management
- transfer
- follow-up

Adoption
- intention
- use

Outcomes
- patient
- practitioner
- system

Ottawa Model of Research Use (OMRU), a framework for adopting innovations

PLAN

- Design: quality improvement project
- Project timeline: 12 weeks starting February 2021
- Participants: PCPs at 4 VA clinics in Illinois & Wisconsin
- Send PCPs information on order set via email with flyer & imbedded instructional video over a three-month period (initial week, 6 weeks, and 11 weeks)
- Evaluation: Utilization of the order set bundle.
- Outcome indicator: Number of consults placed over a 12-week period (measured biweekly)
- Results: Pending

Implications for Practice

- CDS tools can promote evidence-based guided care for primary care providers and T2DM patients.
- More guideline-based order sets can be created in the future for other chronic diseases (ex. COPD)

Sustainability

- Saves time
- Saves money $
- Saves lives!
- Pay for Performance bonus for providers
- Provider input from the beginning

References

3. Veterans Health Administration. (2017). VA/DoD Clinical Practice Guideline for the Management of Type 2 Diabetes Mellitus in Primary Care. 2017; White, K., Dudley-Brown, S.,

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