PRIMARY CARE ANALYTICS TEAM

A Clinical Informatics Tool Using Empiric Segmentation to Support Complex, High-Risk Patient Care in VA PACT

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FINDINGS:

- A new web-based care planning tool displaying data-driven comorbidity subgroups of high CAN-score patients is now nationally available to PACT teams within the Patient Care Assessment System (PCAS) **(Screenshot 1)**
- The tool displays each comorbidity group's common utilization patterns and suggested care steps, customized to the patient and their group and linked to task tracking features **(Screenshot 2)**
- The tool supports proactive and efficient management of care needs for high-risk patients on a PACT team's panel

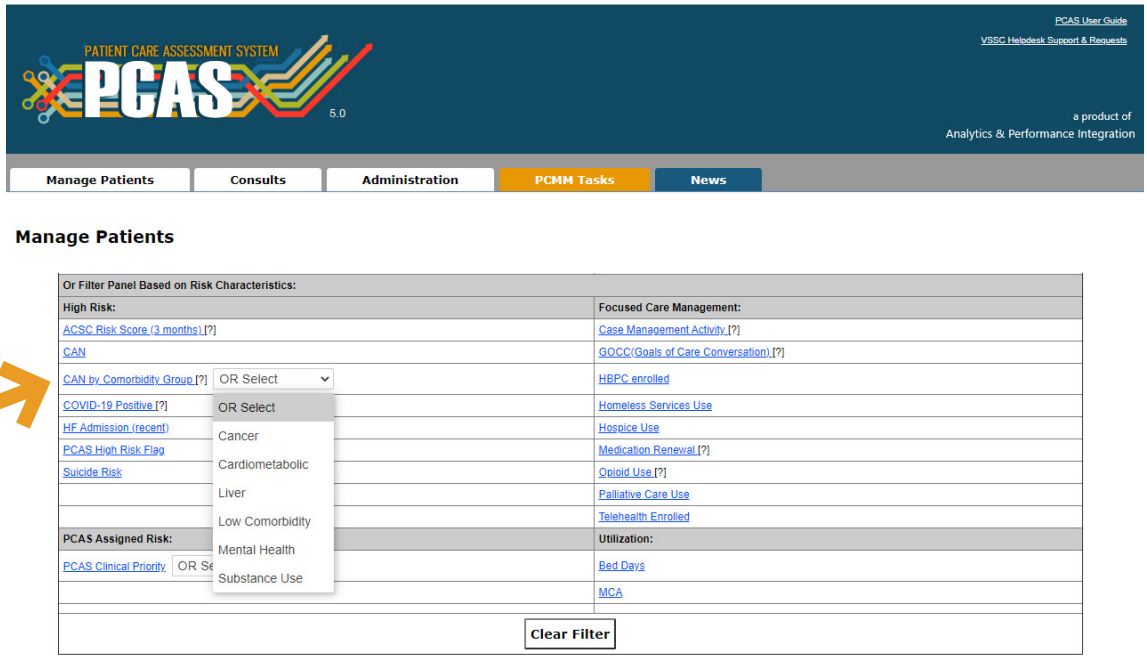
EVIDENCE:

The original prototype was developed in partnership with VA Clinical Systems Design and Evaluation (CSDE), then iteratively updated based on several rounds of human-centered design feedback from primary care providers (PCP) and nurse care managers.

RESULTS:

Users gave actionable feedback on improving graphical display and terminology. The tool was described as:

- Useful for PCPs for panel management and monitoring care needs;
- Desirable for proactive identification of needs and in-depth understanding of patient groupings; and
- Credible due to valid, established data sources, with future credibility dependent on frequency of group and care step updates.



Cardiometabolic Comorbidity High-Risk Group

Patient Name: SSN: DOB:

Diagnoses Reported for this Patient

- Alcohol Use ☐
- Drug Use ☐
- Nicotine Use ☐
- PTSD ☐
- Depression ☑
- Anxiety Disorder ☐
- Bipolar Disorder ☐
- Psychosis ☐
- CAD ☑
- Arrhythmia ☐
- CHF ☐
- Diabetes ☑
- CKD ☐
- Liver Disease ☐
- Chronic Pulm ☑
- Pain & Arthritis ☐
- Cerebrovascular ☐
- Cancer ☐

Cardiometabolic Group Care Steps

Suggested Care Steps are based on factors that drive risk for hospitalization for patients in this group. Care Steps are meant to prompt you to consider care that may avoid hospitalization, but is not already reflected in quality metric reminders.

Patients in the Cardiometabolic Group who also have kidney disease or active mental health conditions are at highest risk for hospitalization and poor health outcomes.

Care steps listed come from computer algorithms and are appropriate for many, but not all, patients in this group. Clinical judgement and shared decision making with the patient is required.

CARE STEP TO CONSIDER	RECEIVED*
1. For patients with CKD Stage III-V, has the patient had a nephrology visit in the last 14 months?	Yes (1/20/2021)
2. Patients in this group with active mental health conditions are at higher risk for hospitalization. If the patient shows signs of a mental health condition, consider consulting PMCHI or Mental Health for a thorough assessment, even if the patient does not have a current mental health condition diagnosis	No – Add a Task
3. For patients with a high predicted one-year risk of death, Has the patient had a palliative or hospice care encounter in the last 14 months?	Not Applicable

*Data are refreshed nightly

Background Information

About the Cardiometabolic Group

Patients in this group:
1) Have VA Care Assessment Needs (CAN) hospitalization score ≥ 90th percentile within the last year.
2) Match the Cardiometabolic Group diagnosis profile at 80% likelihood or higher.

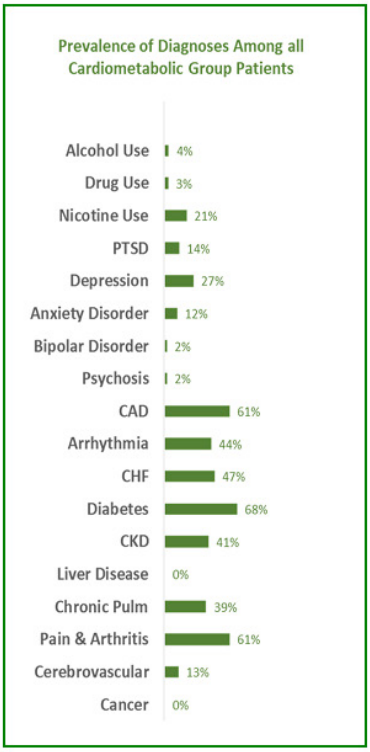
This patient's pattern of diagnoses over the last year best align with the Cardiometabolic Group.

Patients in Cardiometabolic Group often have CAD, CHF, and diabetes. Reference the checkmarks above to identify which diagnoses this patient has that align them with this group.

Everyone in this group is at high risk of being hospitalized over the next 12 months (CAN score ≥ 90).

Patients in the Cardiometabolic Group with diagnoses of **kidney disease** or **mental health conditions** tend to have particularly high numbers of comorbid diagnoses and high clinical complexity compared to others in this group.

As compared to other High CAN patients, patients in the Cardiometabolic Group have these characteristics:
- Highest rate of 30-day hospital readmissions
- High rate of visits to subspecialists
- Low rate of referral to palliative care even when they may qualify



Click Here for Methodology

The analyses reported here were performed at the request of the Office of Primary Care.

Poster presented at Virtual AcademyHealth Research Meeting & Society for Internal Medicine Annual Meeting: Schuttner, L., Daniels, K., Litam, T., Piegari, R., Box, T., Rosland, A (2021). "Development of a Clinical Informatics Tool Using Empiric Segmentation to Support Care Plans for Complex, High-Risk Patients within the Veterans Health Administration.

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