Innovations in Complex Chronic Disease Management

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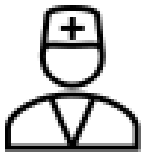



Why Do We Need Innovations in Chronic Disease Management?

We have not fixed this problem:
About 50% of patients with chronic disease still have not achieved ‘control’

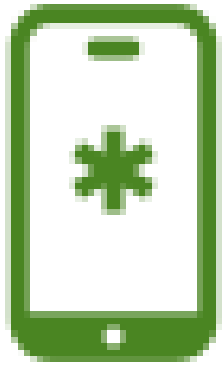
The patients who are not under control are not responding to the easy fixes

Care of chronic disease is getting more complex:
Multiple chronic diseases, aging population, diagnosed earlier/living longer with chronic disease

The 60/30/10 Population Challenge

Uncontrolled chronic disease has big impacts:
Health Outcomes, Quality of Care, Utilization, Provider Burnout

Leveraging
Family and Community
Support



‘Smart’ High Risk Panel
Management Tools

Family Support is a Powerful Untapped Resource in Chronic Disease Management

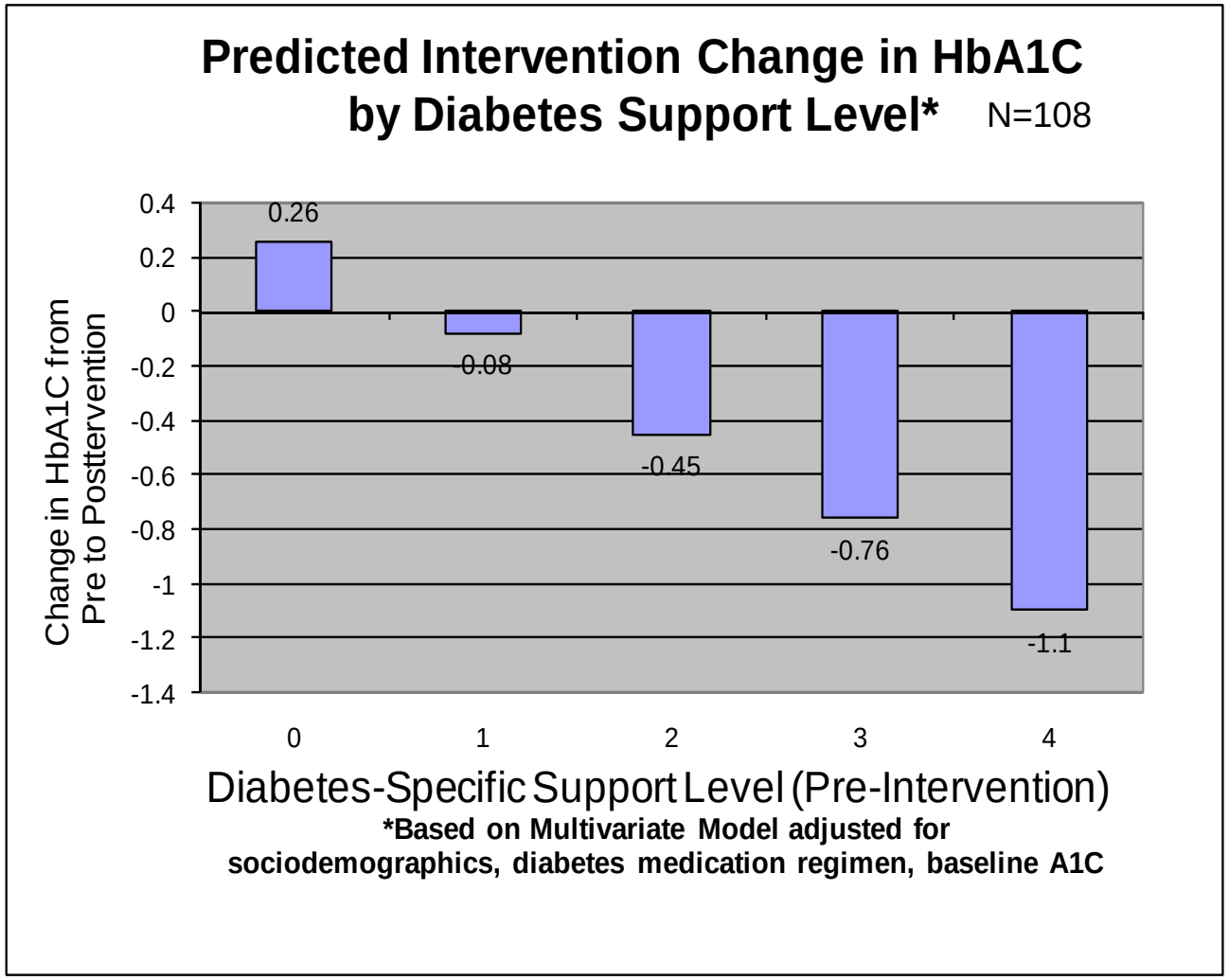
50-75% of Functionally Able Adults with Chronic Disease Have a Family Member Involved in Their Care

Family Support Has Powerful Effects on Chronic Disease outcomes

Family Supporters Play a Big Role in Health Care Visits and Health System Navigation

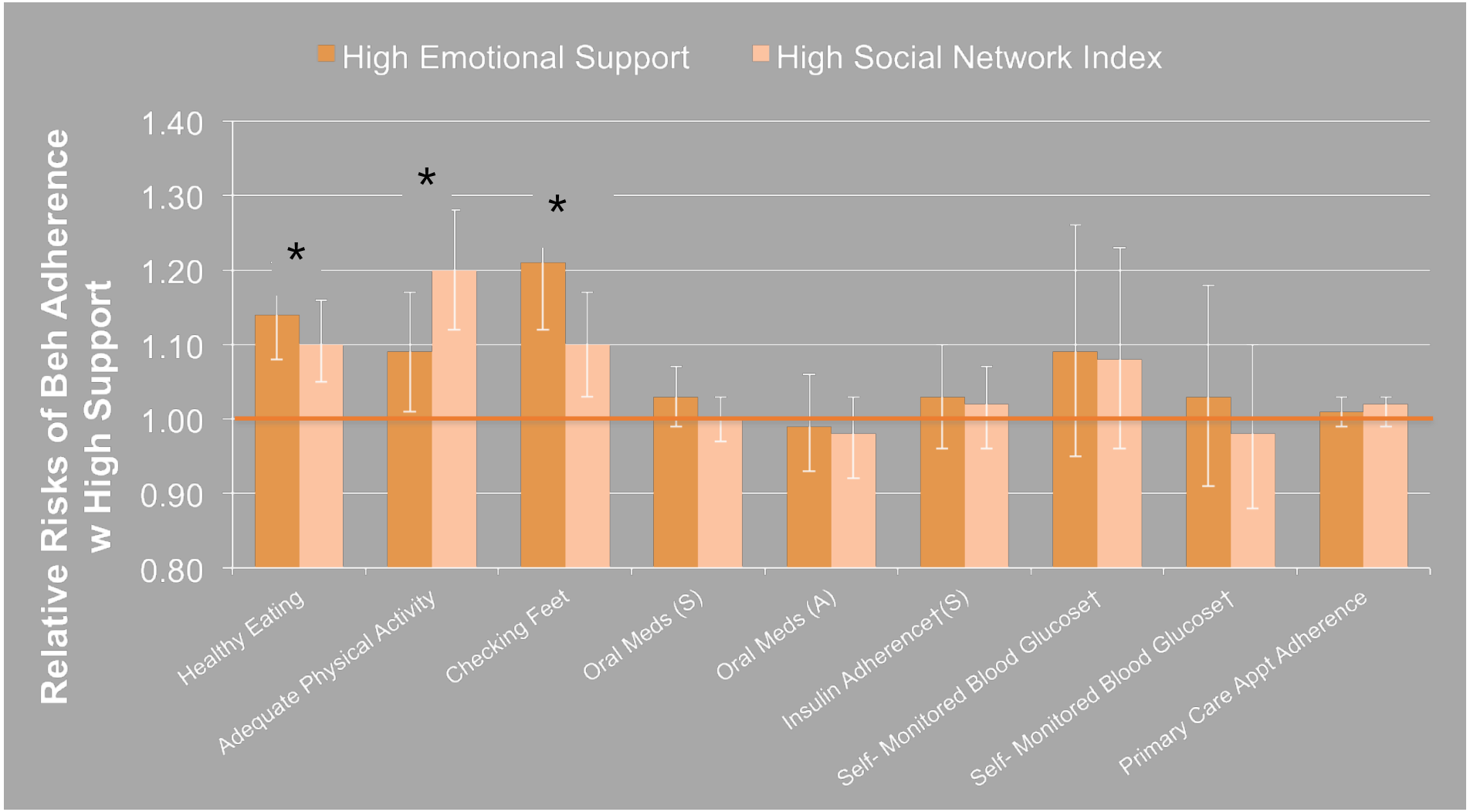
Family Are Able to Help From A Distance

Impact of Pre-Existing Social Support on Diabetes Self-Management Intervention Success



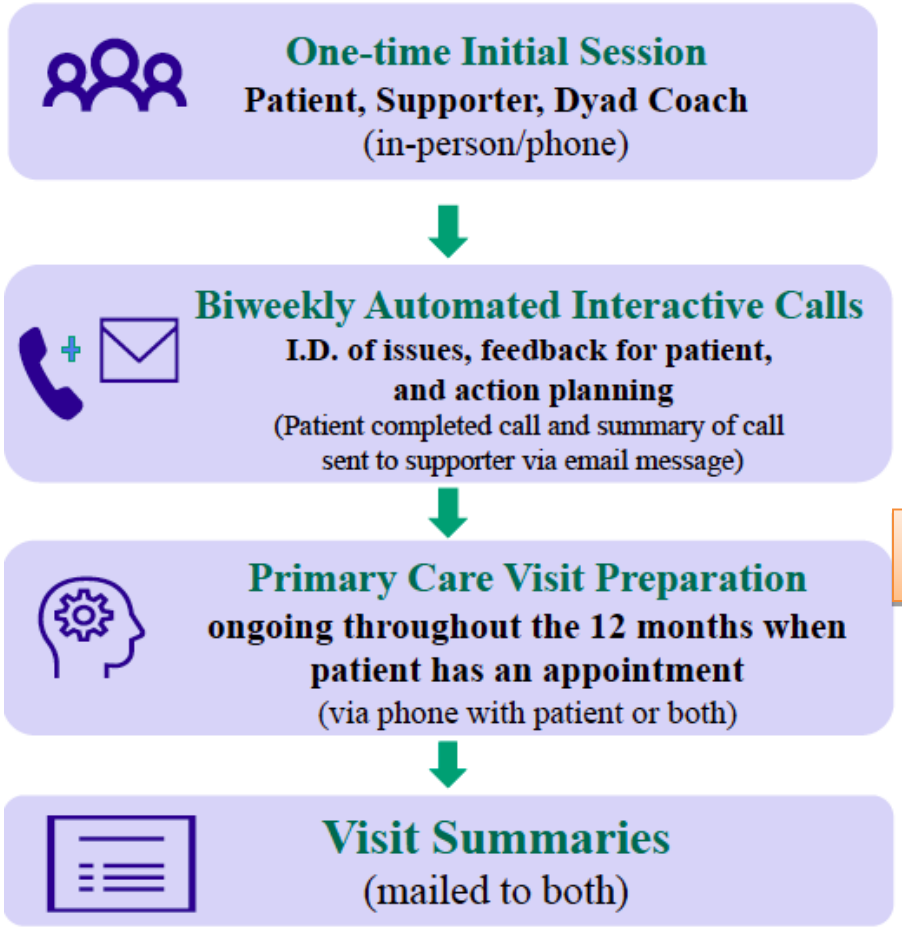
Rosland et al, Patient Education and Counseling, 2015

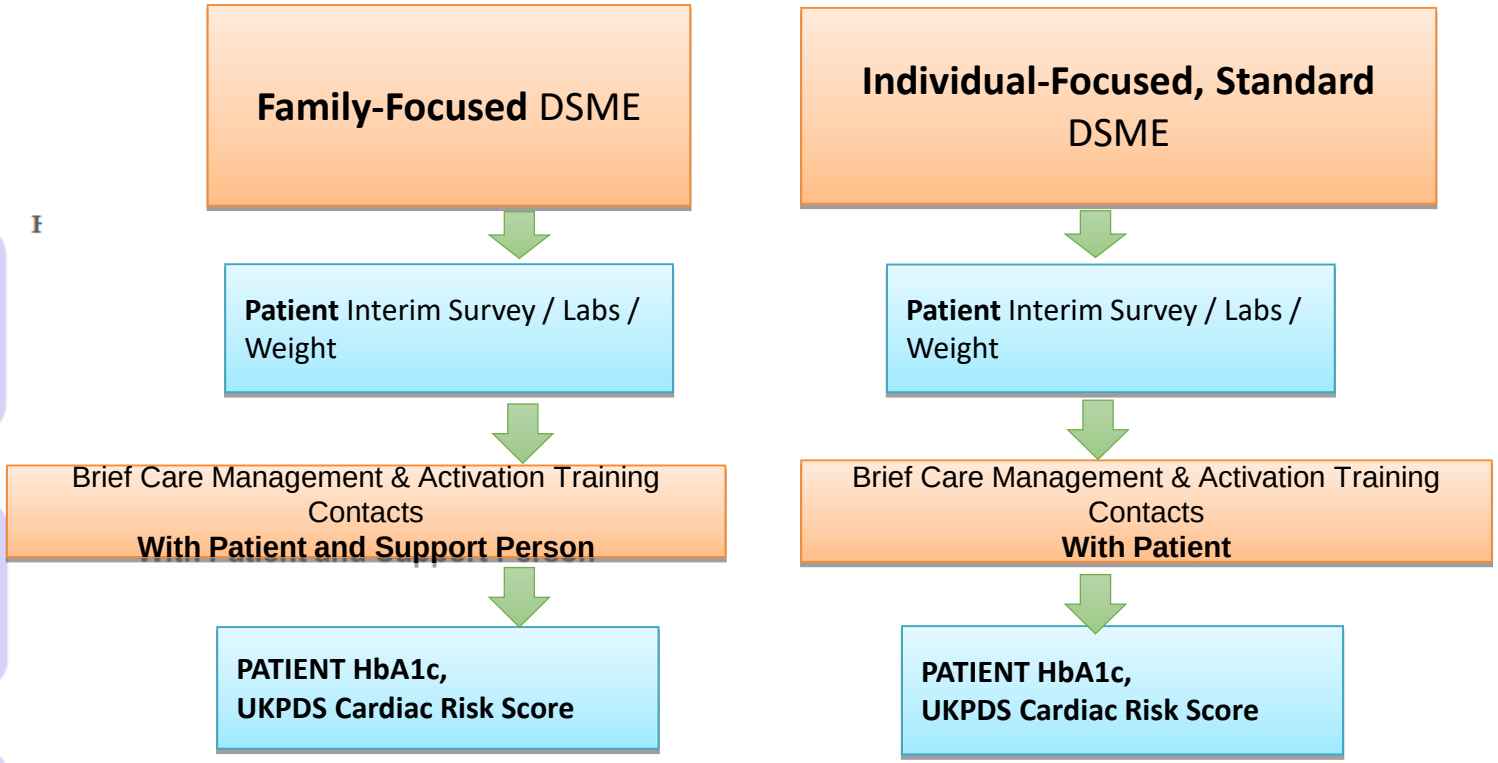
Social Support and Lifestyle vs. Medical Self-Management (N 13,366)



Models adjusted for sociodemographics, SF-8, comorbidities, diabetes duration, depressive symptoms, hospitalization, number of meds, number of appointmetnts. *95% Confidence Interval does not cross 1 †Among insulin users only
(S) = Self-reported (A) = Derived from administrative data
Rosland et al, Annals of Behavioral Medicine 2014

How can we leverage the power of family support?





VA CO-IMPACT Trial

NIH FAM-ACT Trial

Expected Outcomes

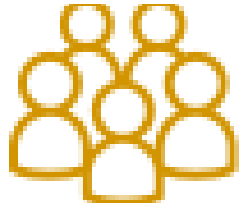
Well-honed materials and tools

Does it help patients to put extra effort into engaging family?

If so, would clinics put more resources into it?

Could we allow clinics to bill for family education?

Could we help make it easier for patients to share their medical information if they want to?



What patients does it help the most?

Management of Complex, High Risk Patients

We can identify who is at high risk……but what care do they need?

Which health conditions to prioritize?

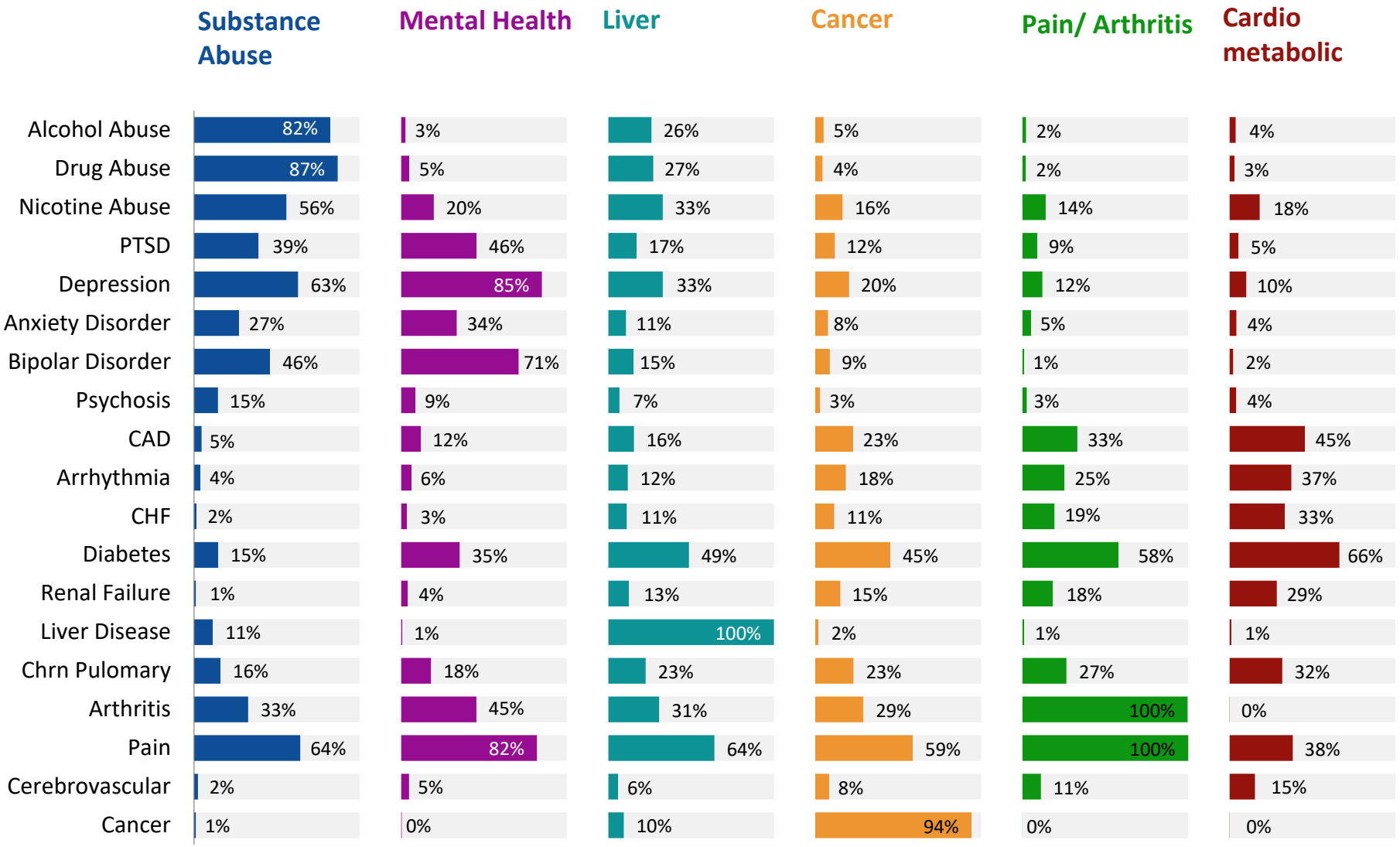
Who should be responsible for managing the care?

Lead, National VA High Risk Investigator Network

Project Lead, VA Primary Care Analytic Team

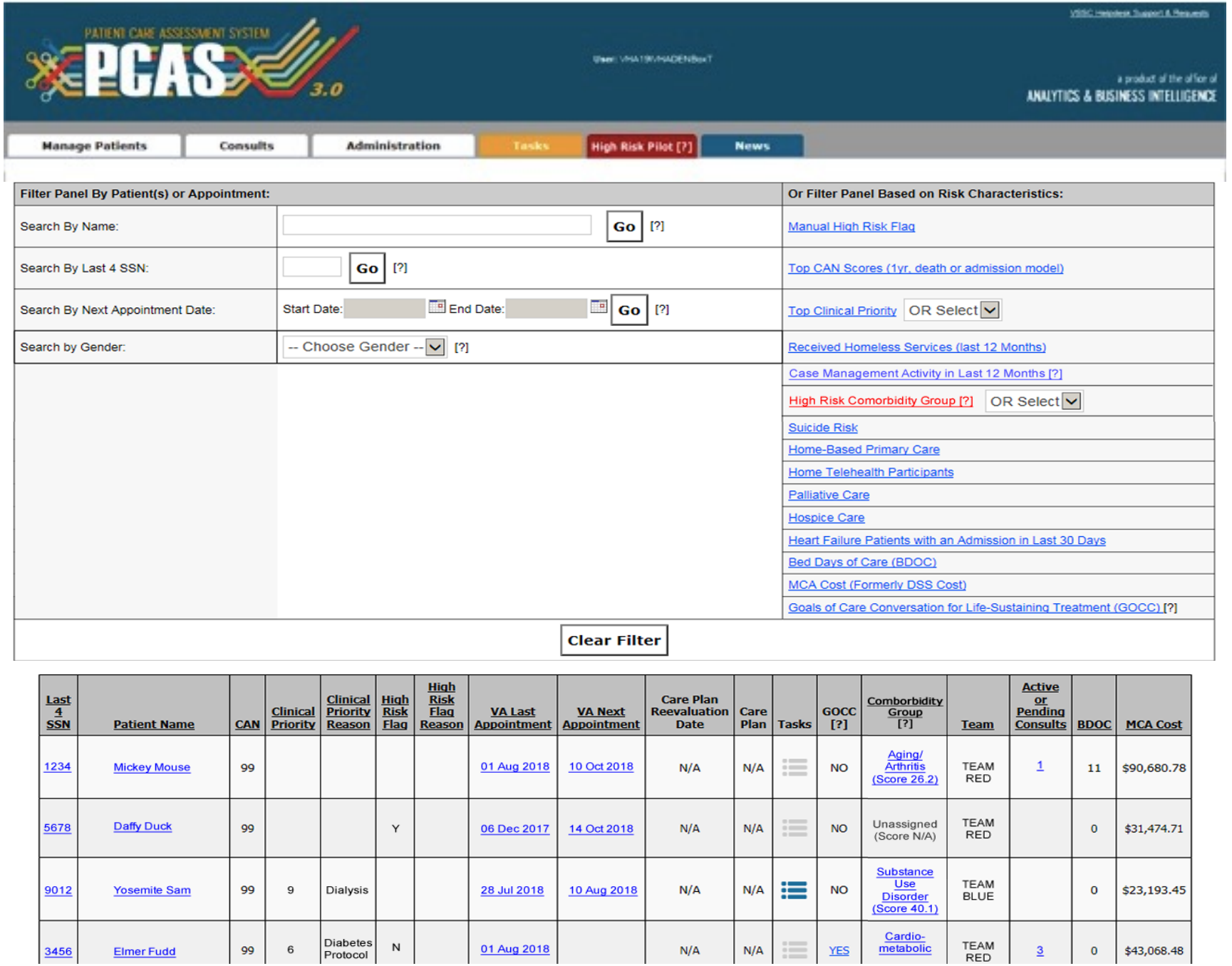
Funded by VA Office of Primary Care

What natural clusters of chronic conditions exist among Veterans at high risk of hospitalization?



Prenovost, Rosland; PLOS; 2018

High Risk Panel Management Tool



Last 4 SSN	Patient Name	CAN	Clinical Priority	Clinical Priority Reason	High Risk Flag	High Risk Flag Reason	VA Last Appointment	VA Next Appointment	Care Plan Reevaluation Date	Care Plan	Tasks	GOCC [?]	Comorbidity Group [?]	Team	Active or Pending Consults	BDOC	MCA Cost
1234	Mickey Mouse	99					01 Aug 2018	10 Oct 2018	N/A	N/A		NO	Aging/ Arthritis (Score 26.2)	TEAM RED	1	11	$90,680.78
5678	Daffy Duck	99			Y		06 Dec 2017	14 Oct 2018	N/A	N/A		NO	Unassigned (Score N/A)	TEAM RED		0	$31,474.71
9012	Yosemite Sam	99	9	Dialysis			28 Jul 2018	10 Aug 2018	N/A	N/A		NO	Substance Use Disorder (Score 40.1)	TEAM BLUE		0	$23,193.45
3456	Elmer Fudd	99	6	Diabetes Protocol	N		01 Aug 2018		N/A	N/A		YES	Cardio-metabolic	TEAM RED	3	0	$43,068.48

PATIENT INFORMATION

Risk Characteristics
Patient Demographics
Secondary Contacts
Team Information

CLINICAL DISPOSITION

Upcoming Appointments
Outpatient Encounters
Inpatient Discharges
Labs and Immunizations
Health Factors
Vital Signs
Medications
Patient Consults

CARE PLANNING

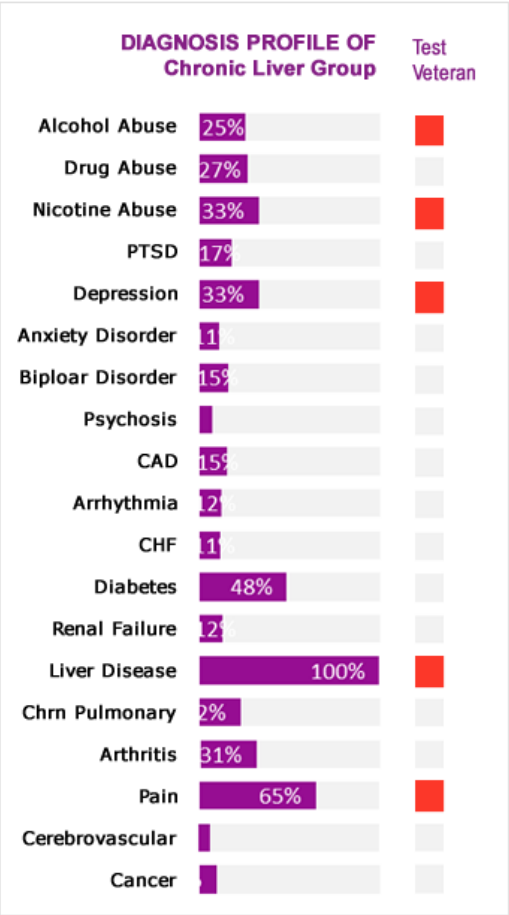
Learning Preferences
Personal Health Inventory

TASKS and REMINDERS

CARE NOTE DETAILS

High Risk Comorbidity Group

Patient Name: Test Veteran SSN: XXX DOB: 00/00/000



Chronic Liver Comorbidity Group Care Evaluation

Consider whether these services are appropriate for this patient. If so, add a PCAS Task as a reminder for the services, or go directly to the health record and create an order or referral for the care needed.

CARE STEP TO CONSIDER	RECEIVED IN THE LAST 12 MONTHS
1. Hepatitis V Vaccination	NO (Add a Task)
2. EGD for variceal screen if cirrhosis	04/01/2018
3. Goals of Care Conversation documented in standard template	09/01/2018

About the Chronic Liver Comorbidity Group [?]

Patients in this group have:
1) VA Care Assessment Needs (CAN) hospitalization score >= 90th percentile.
2) Match the Chronic Liver profile at 80% likelihood or higher.

This patient's pattern of diagnoses over the last year best align with the Chronic Liver group.

Patients in the Chronic Liver group often have Liver Disease, Diabetes, Depression. Reference the figure to the left to identify which diagnoses this patient has that aligned 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 Complex Chronic Liver group with diagnoses of **Renal Failure** tend to have particularly high numbers of comorbid diagnoses and high clinical complexity compared to others in this group.

Patients in the Complex Chronic Liver group have these characteristics:

- 2nd highest VA ED/urgent care visit rate among groups
- Most frequent hospitalizations among groups
- Low rate of Home Based Primary Care program use
- 2nd highest rate of dialysis among groups
- High rate of mortality compared to other groups

Expected Outcomes

- Methods to accurately apply clustering models to real-time high risk patient populations
- Develop and test provider facing High Risk Panel Management Tool
- VA HSR&D Merit Grant Proposal to strengthen the informatics and clinical base for the tool
- >> Apply methodological approach to other HCS
- >> Intervention trial in VA Primary Care

Thank You