

Predicting Risk of Hospitalization and Death

SD Fihn MD MPH

Clinical System Development and Evaluation
Veterans Health Administration


July 2016

POLL

What is your primary role in the VA?

- A. PACT Physician
- B. PACT Nurse
- C. Other Clinical Staff
- D. Other Administrative Staff
- E. Other

Knowledge of a patient's clinical characteristics and risk of adverse event can help target services



Broad range of clinical programs designed improve care for veterans with complex chronic illness

Home-based primary care

Providers can't accurately predict patients at highest risk of deterioration

PACT RN Care Managers charged to coordinate care

No systematic way to identify Veterans who might benefit most → predictive analytics using data from EHR

Initial Development of the Care Assessment Need (CAN) Score

- 4,505,501 veterans enrolled in primary care who had ≥ 1 visit
 - Validated models in literature \rightarrow Benchmarking, Candidate covariates
- Standard and multinomial (polytomous) logistic regression
 - Conjoint modeling of hospitalization/death w/in 90d, 1-yr
 - 90 terms from 7 domains in CDW
- Probability of admission or death within a specified time period (90 days or 1 year) converted to percentile, (0 = lowest risk, 99 = highest risk) in relation to all other enrolled Veterans

Wang L, et al. Medical Care 2013;51:368-73.

Input Variables – CAN 2.0

Demographics

Age Group
Air Force Flag
Eligibility (1, [2-4], 5+)
Rank Flag (Officer vs
Enlisted)
Marital Status
Priority
SES index
Sex

Vital Signs

BMI (≥ 40)
Weight Variability
HR (80-60)
Resp Rate (≥ 20)
Sys & Dias BP

Utilization

No. Hospital/Bed Days
No. Medical Providers
No. Visit Type:
All
Inpatient
Emergency Care
Cardiology
CT
Mental Health
Other Non-Face
Primary Care (PC)
Phone Care
PC Phone Care
No. 11-20min Phone
No. 21-30min Phone
No. Est Office Visit

Chronic Illness

Deyo-Charlson Score
HCCs:
AFib and CHF
Dementia
Mental Health and PTSD
Metastatic Cancer
Alcohol
Chronic Airway
Obstruction

Lab/Radiology

No. Albumin
No. Blood, Urine, Nitrogen
Lymphocytes (Low)
Red Blood Cells (Low)
Sodium (Low)
White Blood Cells (High)
No. Troponin
No. Chest X-Ray

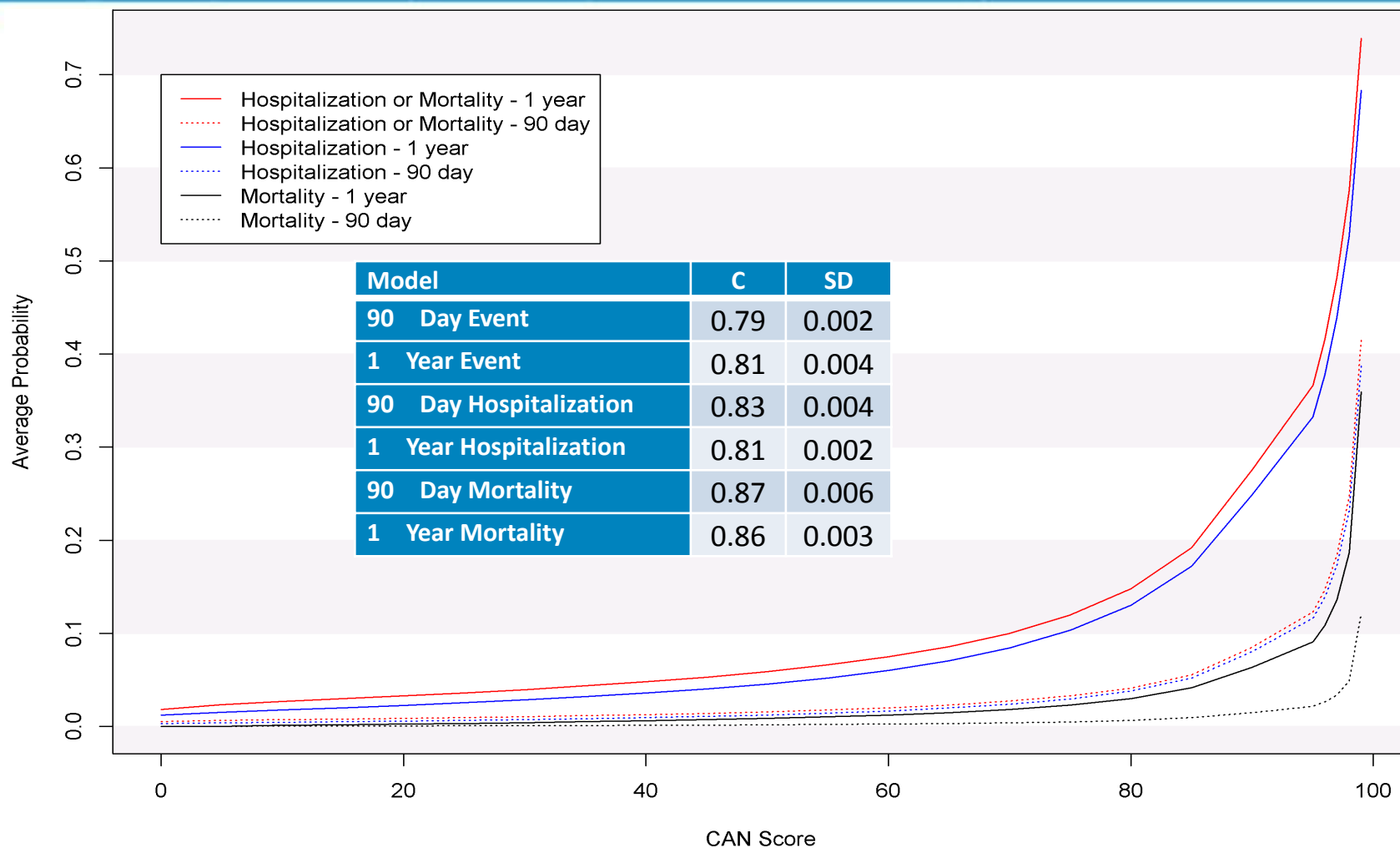
Pharmacy

Antipsychotic
Beta-blocker
Benzodiazepine
Beta agonist nebulizer
Furosemide
Statin
Metformin
NSAID
Furosemide Tablets
No. of drugs filled

Text Notes

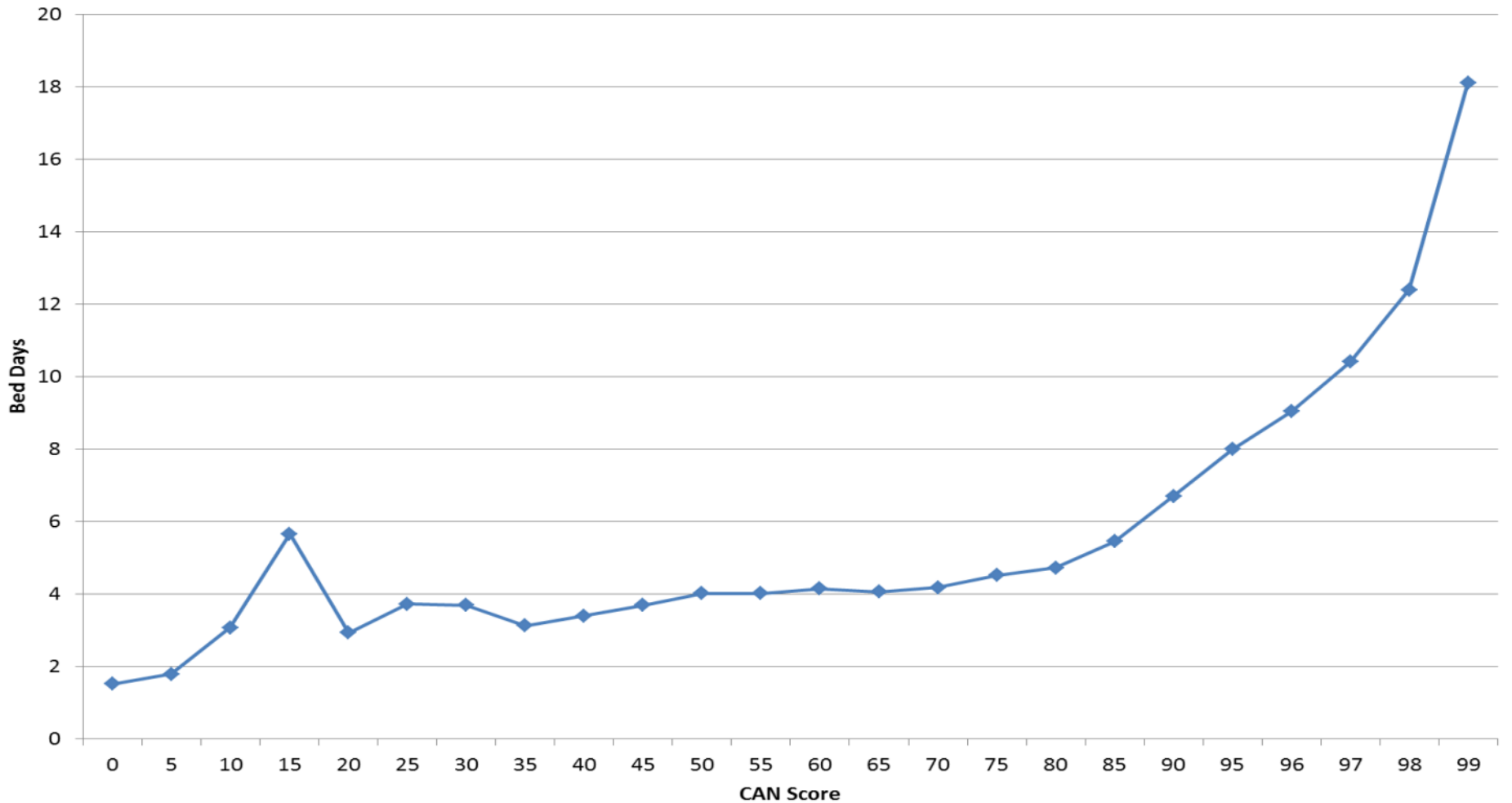
No. Consent Notes
No. Telephone Notes

Average Probabilities by CAN Score

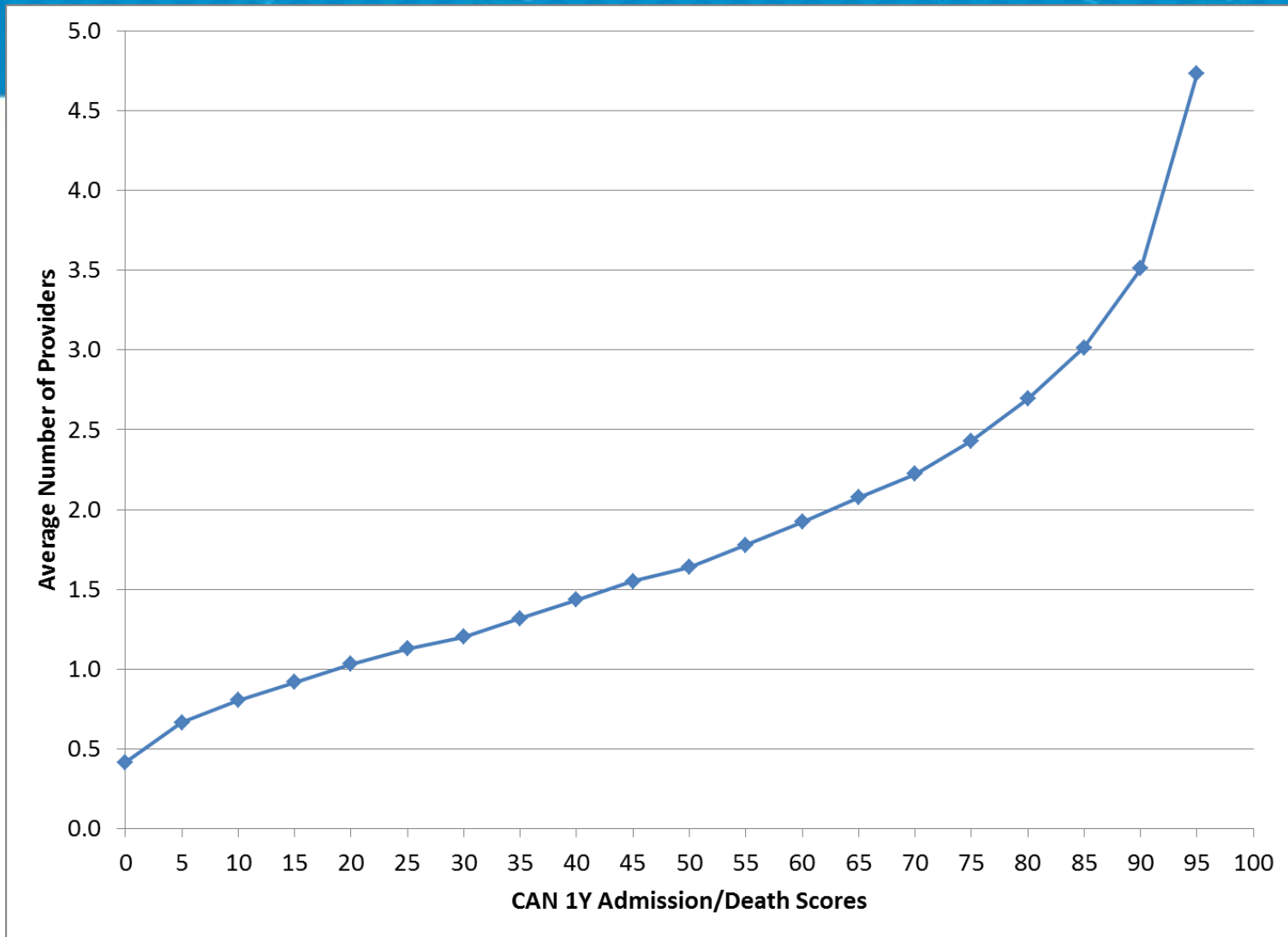


Mean Bed Days

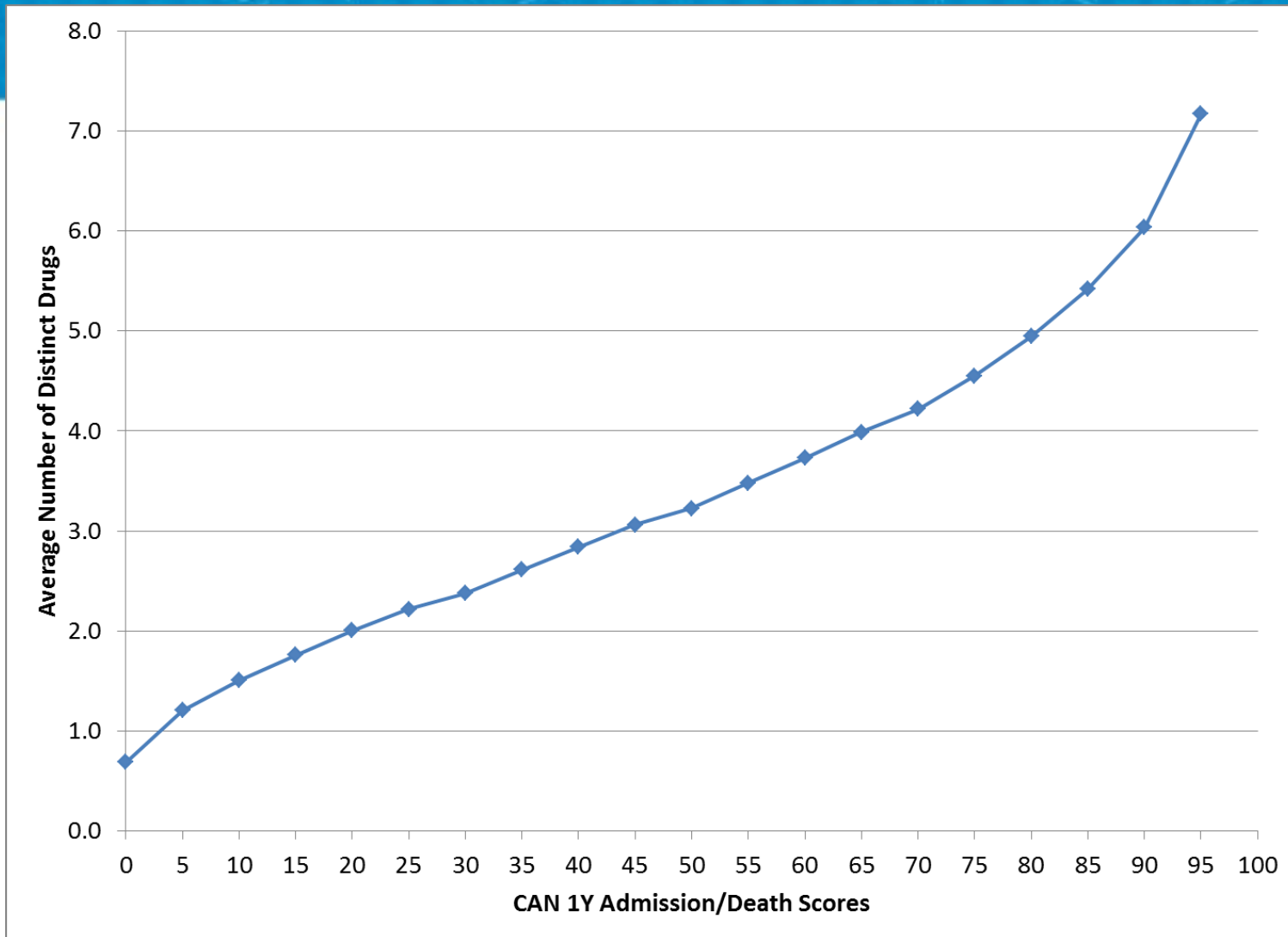
Average # of Bed Days by CAN Score



Mean Number of Providers by CAN Score



Mean Number of Distinct Drugs by CAN Score



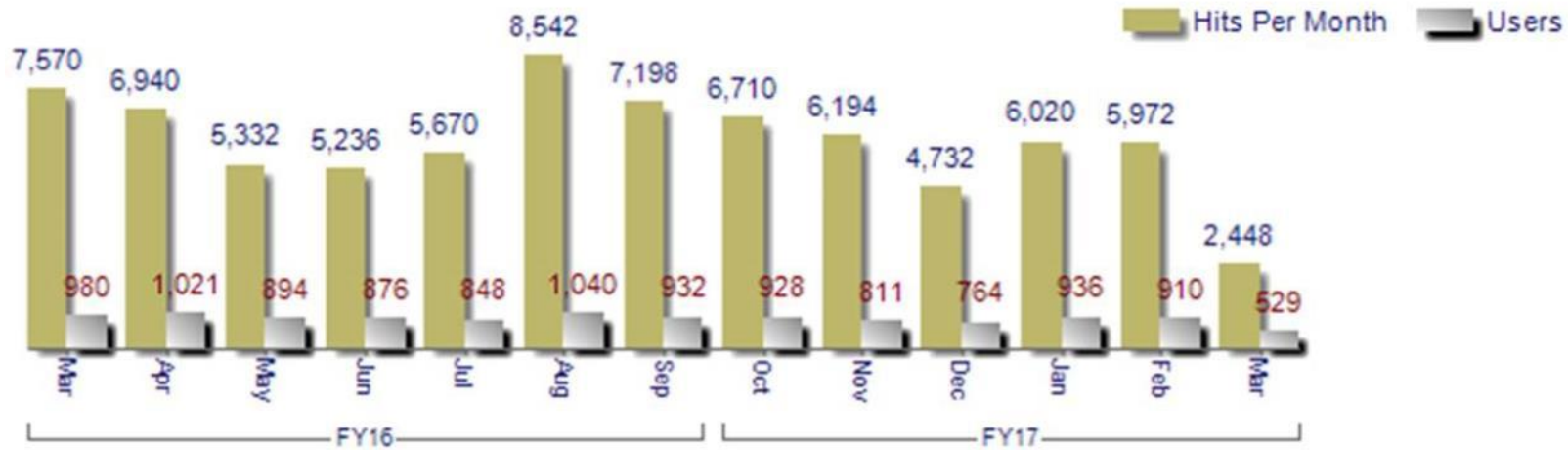
Risk Data Updated Weekly



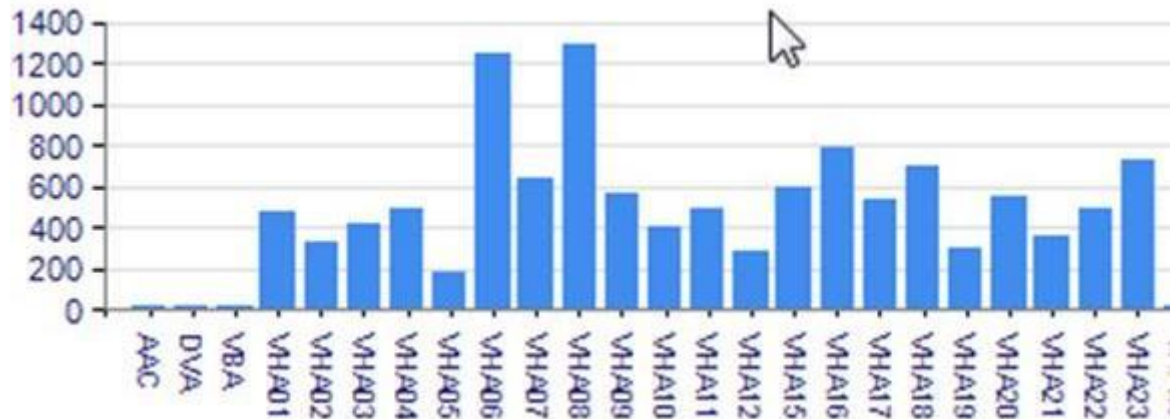
CARE MANAGEMENT RESOURCES IN USE					UTILIZATION					
CCHT	PALLIATIVE CARE	Last Pal Care Visit	HBPC	Last HBPC Visit	2yr ER/UC Visit Count	2yr Disch Count	Last Disch Date	2yr PC Visit Count	Last PC Visit Location	Last PC Visit Date
					2					

CAN Score	Patient Name	SSN	Probability of Event	Diagnoses Count	CARE MANAGEMENT RESOURCES IN USE					UTILIZATION					
					CCHT	PALLIATIVE CARE	Last Pal Care Visit	HBPC	Last HBPC Visit	2yr ER/UC Visit Count	2yr Disch Count	Last Disch Date	2yr PC Visit Count	Last PC Visit Location	Last PC Visit Date
99			45 %	4						2					
			18 %	7						5	1				
97			18 %	3						3					
			15 %	5						4					
96			15 %	4						3	2				

CAN USAGE 2016-17

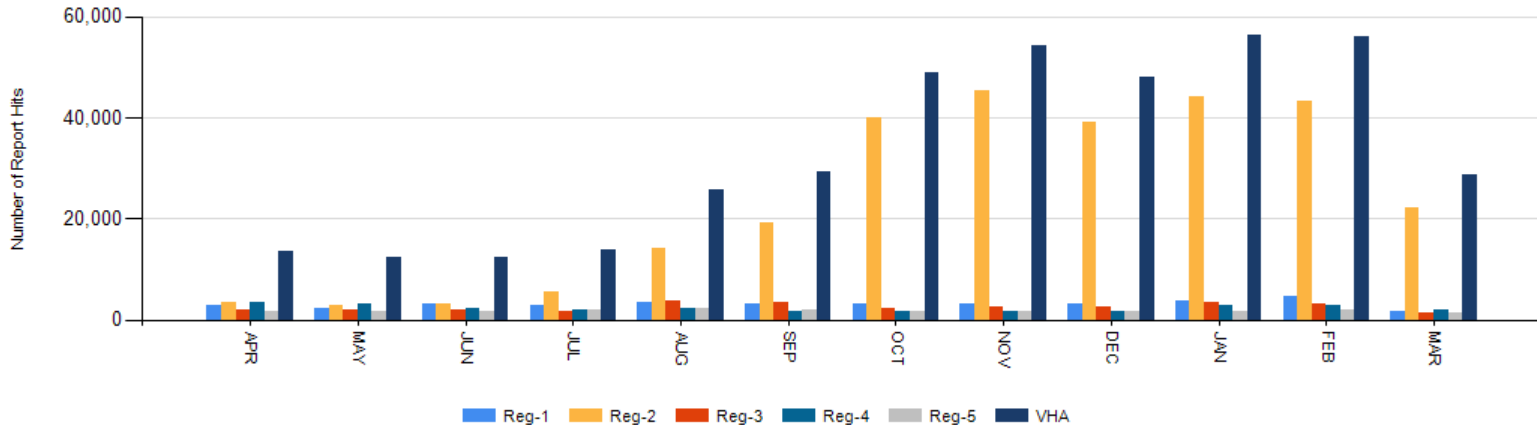


Unique Users
By VISN all years

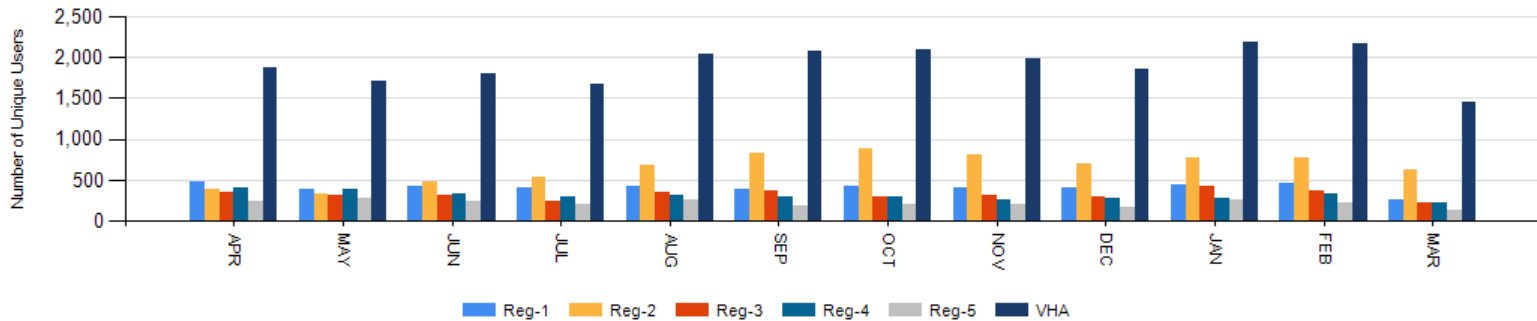


Current CAN Usage -- Most Use in Region 2 (VISN 8)

CAN Score Report Usage by Region and VHA for Past Twelve Months



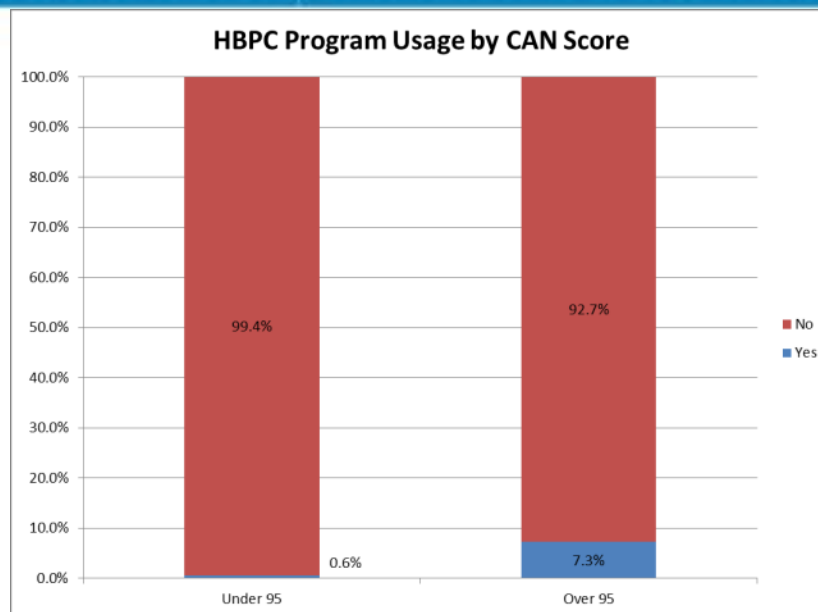
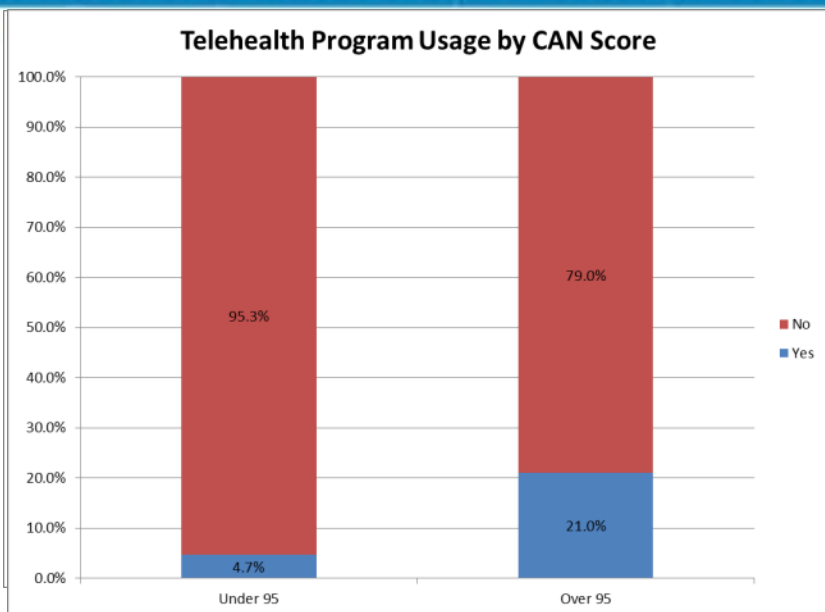
CAN Score Report User Count by Region and VHA for Past Twelve Months



* This only reflects use of reports produced by the VSSC and will not include counts of when RDW or VDW have included the CAN Score index in a local or regional report.

** Drill to detail by selecting a Region column.

Few Patients with High Scores Referred to Coordination Programs Telehealth, HBPC, Palliative Care, and Hospice



Palliative Care

Score ≥ 95 -- 5,000 of 268,833 total patients (1.9%)

Hospice

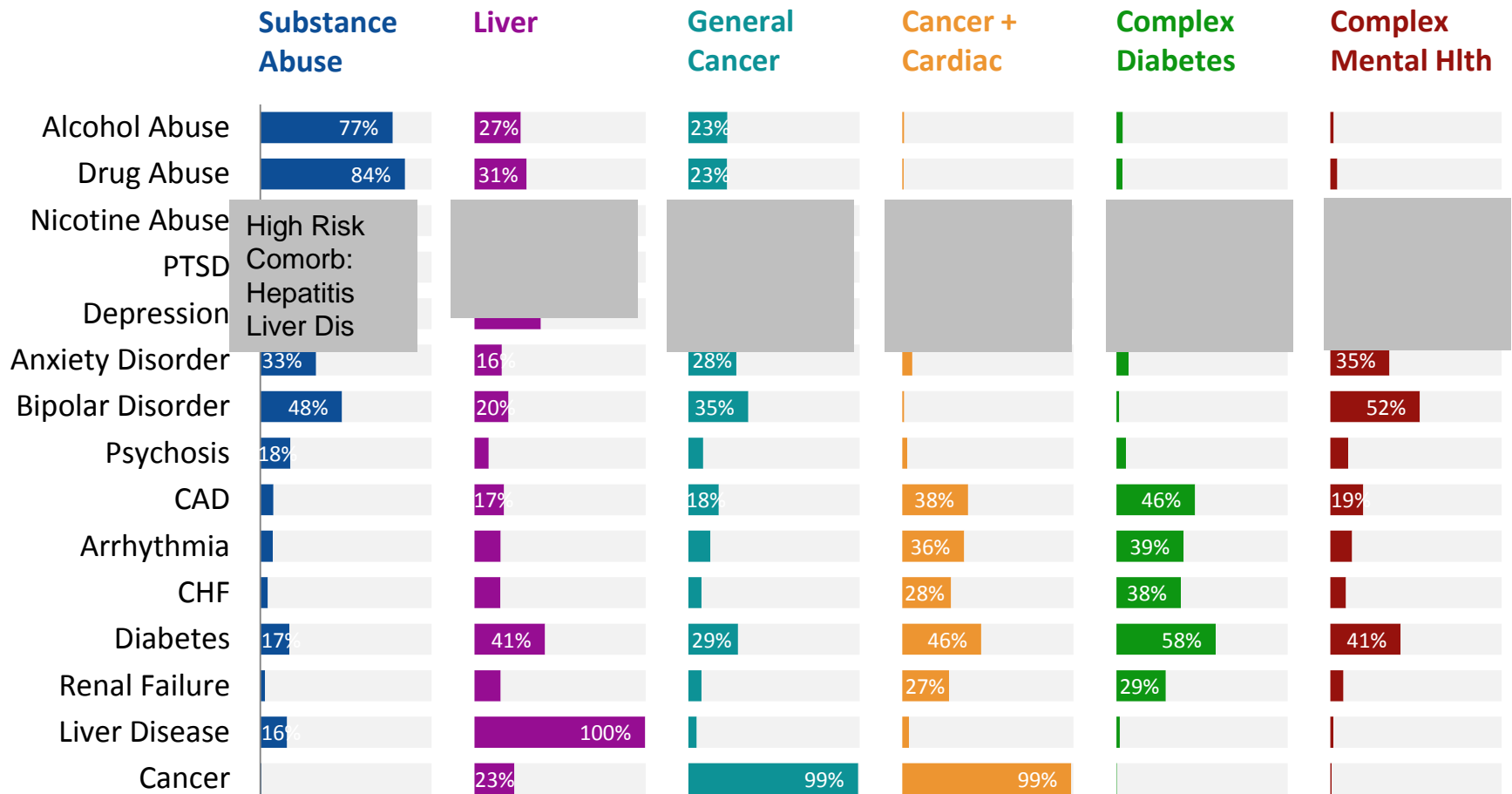
Score ≥ 95 -- 775 of 268,833 total patients (0.2%)

Issues

- Nonspecificity
 - About 1/3 of patients with very high score deemed appropriate for intensive primary care management.
 - Score does not link to specific action
 - Out of work-flow
- Depends mainly on VA data
 - May not perform as well for care in the community.
- Special Populations

Clinical Subgroups of High-Risk Patients (IRT)

Diagnoses by Subgroup



Inpatient Services of High Risk Patients

Subgroup	N patients	All VA Hospitalizations Per Pt/Per Year Mean (SD)	Psychiatric Hospitalizations Per Pt/Per Year Mean (SD)	Readmissions within 30 days Per Pt/Per Year Mean (SD)	Length of Stay 8+ days (% of All Hospitalizations)	ED Visits Per Pt/Per Year Mean (SD)
“Substance Abuse”	10,579	1.06 (1.68)	0.24 (0.69)	0.55 (1.02)	65.6	2.72 (3.81)
“Liver”	5,826	1.14 (1.67)	0.05 (0.30)	0.55 (1.03)	53.2	2.28 (2.99)
“General Cancer”	5,026	0.83 (1.35)	0.05 (0.28)	0.63 (1.26)	49.4	1.95 (2.84)
“Cancer + Cardiac”	8,628	1.09 (1.54)	0.01 (0.09)	0.58 (1.11)	52.6	2.00 (2.50)
“Complex Diabetes”	23,691	0.86 (0.57)	0.01 (0.15)	0.58 (1.07)	45.7	1.95 (2.55)
“Complex Mental Hth”	14,649	0.57 (1.02)	0.09 (0.40)	0.55 (1.09)	40.2	2.08 (2.70)

Outpatient Services of High Risk Patients

Subgroup	N patients	Per Patient/Per Year: Mean (SD)				
		PC PCP visits in person	PC phone visits (all providers)	Outpatient specialty visits (any non-PC encounters)	Mental health clinic outpatient encounters	PCMH in person & phone encounters
“Substance Abuse”	10,579	4.65 (4.74)	0.25 (0.52)	4.70 (7.47)	29.18 (34.58)	0.71 (2.44)
“Liver”	5,826	5.17 (4.33)	0.48 (0.68)	10.59 (12.76)	10.16 (23.08)	0.43 (2.05)
“General Cancer”	5,026	4.94 (4.33)	0.48 (0.68)	11.15 (14.25)	8.85 (18.08)	0.62 (2.53)
“Cancer + Cardiac”	8,628	4.98 (4.54)	0.55 (0.72)	14.40 (17.18)	0.94 (4.47)	0.11 (0.79)
“Complex Diabetes”	23,691	5.18 (4.77)	0.48 (0.70)	9.54 (12.10)	2.27 (9.65)	0.20 (1.34)
“Complex Mental Hlth”	14,649	5.51 (4.74)	0.38 (0.64)	6.70 (8.84)	12.13 (19.27)	0.73 (2.78)



A Point-of-Care Clinical Application for Team-Based Primary Care

Tamara L. Box, PhD

Stephan D. Fihn, MD MPH

MAR 2017

VHA OFFICE OF CLINICAL SYSTEMS DEVELOPMENT AND EVALUATION

POLL

Have you ever used CAN or PCAS?

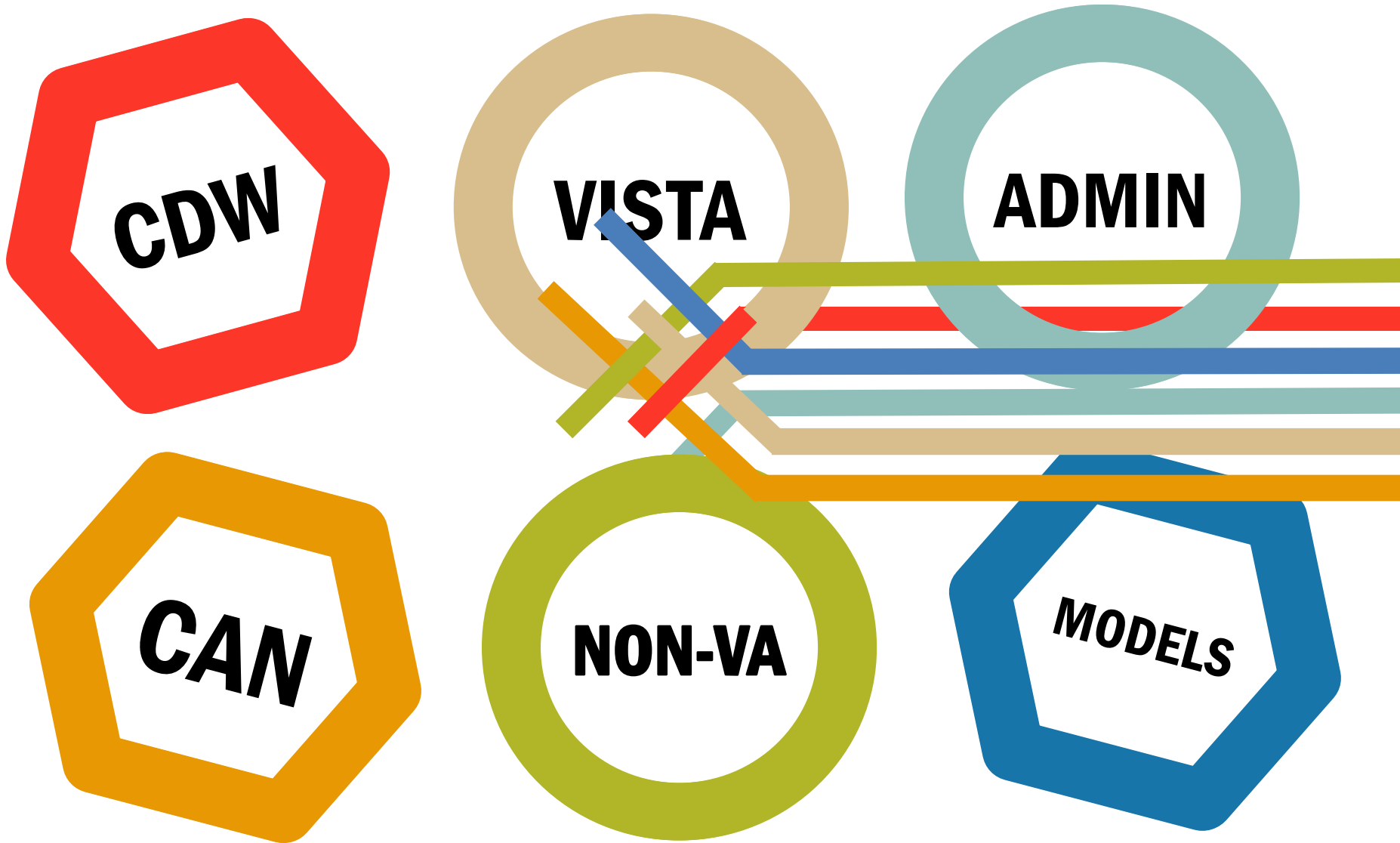
- A. No, I have not used them.
- B. I have only used CAN.
- C. I have only used PCAS.
- D. I use both of them regularly.



The **Patient Care Assessment System** is a
web-based application
to provide
Patient Aligned Care Teams (PACT)
with
tools to
identify, manage, and coordinate care
for their paneled patients.

➡ Special emphasis is given to high risk patients and sub-populations.

PROVIDING DATA IN ONE VIEW



PROVIDING DATA IN ONE VIEW



RISK-BASED

**patient identification
& tracking**

one-click

PANEL FILTERS

**PACT TEAM
management**

monitor

CONSULTS & CARE

PATIENT CARE ASSESSMENT SYSTEM



PCAS

VA/Non-VA

CLINICAL DATA

summary & search

CARE PLANNING

tasks & notifications

RELEASE 3 - CARE and CASE MANAGEMENT

modules & CPRS notes

HOW DO I GET TO PCAS?

- **NO local installation needed**
- **Linked through Primary Care Almanac (Tools Menu)**
(coming soon!)
 - Direct URL
 - Through CPRS
- **No Special Login Required**
 - If you are a member of a PACT team, the application will recognize you!
 - *If you are not part of a team in PCMM, we are working on enhanced access in early 2017 – stay tuned!*
- **Available nationwide; 4000+ users from every VISN and used nearly 30,000 times so far in FY17**

PATIENT CARE ASSESSMENT SYSTEM

PCAS

DEMO





Manage Patients

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Manage Patients

Hide Page Overview...

Use the fields below to filter your panel to find a specific patient or group of patients. Or, use the risk-based panel filters on the right to quickly locate a group of patients. Each underlined column is sortable. Once you have found your patient, simply click on their name to navigate to their PCAS record.

Filter Panel By Patient(s) or Appointment:		Or Filter Panel Based on Risk Characteristics:
Search By Name:	<input type="text"/> <input type="button" value="Go"/> [?]	Manual High Risk Flag
Search By Last 4 SSN:	<input type="text"/> <input type="button" value="Go"/> [?]	Top CAN Scores (1yr. death or admission model)
Search By Next Appointment Date:	Start Date: <input type="text"/> <input type="button" value="Go"/> End Date: <input type="text"/> <input type="button" value="Go"/> [?]	Top Clinical Priority <input type="button" value="OR Select"/> <input type="button" value="v"/>
Search by Gender:	-- Choose Gender -- <input type="button" value="v"/> [?]	Received Homeless Services (last 12 Months)
		Suicide Risk
		Home-Based Primary Care
		Home Telehealth Participants
		Palliative Care
		Hospice Care
		Heart Failure Patients with an Admission in Last 30 Days
		Bed Days of Care (BDOC)
		MCA Cost (Formerly DSS Cost)
		Goals of Care Conversation for Life-Sustaining Treatment (GOCC) [?]
<input type="button" value="Clear Filter"/>		



Manage Patients

Hide Page Overview...

Use the fields below to filter your panel to find a specific patient or group of patients. Or use the filters on the right to filter by risk characteristics. Once you have filtered your panel, you can click on the patient name to view their profile.

Filter Panel By Patient(s) or Appointment:

Search By Name:	<input type="text"/>
Search By Last 4 SSN:	<input type="text"/>
Search By Next Appointment Date:	Start Date: <input type="text"/>
Search by Gender:	-- Choose --

Or Filter Panel Based on Risk Characteristics:

- [Manual High Risk Flag](#)
- [Top CAN Scores \(1yr. death or admission model\)](#)
- [Top Clinical Priority](#)
- [Received Homeless Services \(last 12 Months\)](#)
- [Suicide Risk](#)
- [Home-Based Primary Care](#)
- [Home Telehealth Participants](#)
- [Palliative Care](#)
- [Hospice Care](#)
- [Heart Failure Patients with an Admission in Last 30 Days](#)
- [Bed Days of Care \(BDOC\)](#)
- [MCA Cost \(Formerly DSS Cost\)](#)
- [Goals of Care Conversation for Life-Sustaining Treatment \(GOCC\)\[?\]](#)

sortable.



- Manage Patients
- Consults
- Administration
- Tasks
- News

Manage Patients

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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 [?]	Team	Active or Pending Consults	BDOC	MCA Cost
1000	Test, Patient	99	9	Esophageal cancer s/P surgery	Y	Homeless, Cancer	DD MMM YYYY	DD MMM YYYY	N/A	N/A		NO	TEAM A	1	1	\$23,927.15
1001	Test2, Patient	98	9	CAD, Diabetes, Obesity, Sleep apnea, Pain, anxiety, Dysthymic Disorder	Y	Clinical Priority, Statistical High Risk (CAN)	DD MMM YYYY	DD MMM YYYY	N/A	N/A		NO	TEAM B	3	10	\$40,160.62
1002	Test3, Patient	98	10	PVD, CAD, Carotid Artery Dz, COPD, Tobacco Use, Bipolar Disease	Y		DD MMM YYYY	DD MMM YYYY	N/A	N/A		NO	TEAM B	1	0	\$16,066.27
1003	Test4, Patient	98	7	Hemodialysis	Y	Dialysis	DD MMM YYYY	DD MMM YYYY	N/A	N/A		NO	TEAM A	1	7	\$229,689.76

Liver Transplant Liver Transplant

[BDOC](#)

[DSS](#)

Clear Filter

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Risk Characteristics

Hide Page Overview... 






Statistical, clinical and cost risk factors are provided on this page. Please note: tooltips [?] are provided to help you understand the data. Hover over the [?] to display the tip and click on the [?] to make it disappear.

Hide Risk Indicators... 

Assign Clinical Priority & High Risk Flag

[View History](#)

CARE ASSESSMENT NEEDS SCORES [?]

(CAN) Scores (1-99):	Admission	Combined Event (Death or Admission)
90 day Score:	97 (19%) 	97 (20%) 
1 year Score:	97 (42%) 	97 (53%) 
Clinical Priority (1-10) [?]:	7 	
Manual High-Risk Flag [?]:	Yes	
Risk Flag Reason [?]:	Mild dementia	

National BDOC [?]:	3
Polypharmacy Count [?]:	16
Pain Scale [?]:	0
OEF/OIF/OND [?]:	No
Suicide Risk [?]:	No
Received Homeless Services (last 12 months) [?]:	NULL
Home-Based Primary Care [?]:	No
Home Telehealth Participant [?]:	No
Palliative Care [?]:	No
Hospice Care [?]:	No
Spinal Cord Injury [?]:	NOT APPLICABLE
Agent Orange Exposure Documented [?]:	No
Heart Failure Re-Admission 30-day Watch [?]:	No

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Risk Characteristics

Hide Page Overview... [x]

Risk Characteristics overview and

Patient Name: Test Veteran

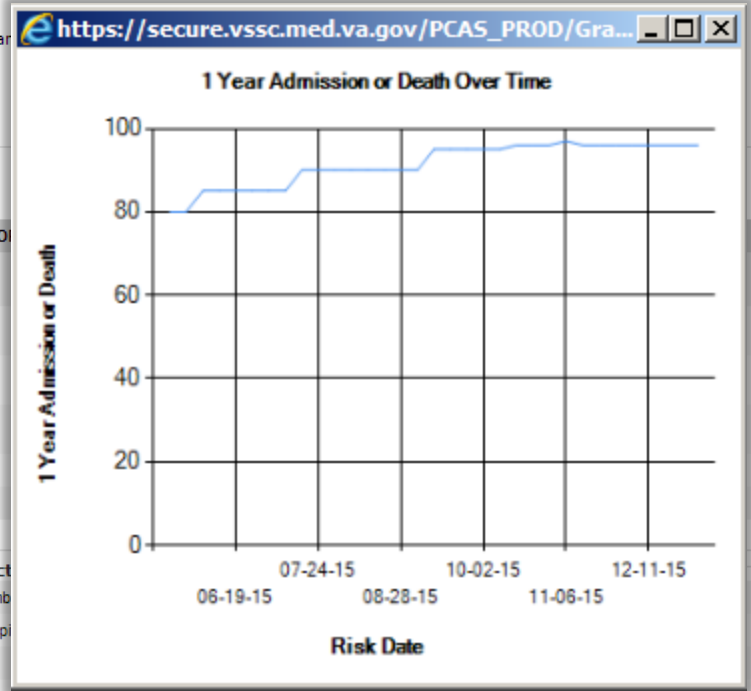
Hide Risk Indicators... [x]

CARE ASSESSMENT NEEDS SCORE

Hide Key Clinical Risk Factors

Number of

Number of Hospital



Polypharmacy Count [?]:	0
Pain Scale [?]:	6
OEF/OIF/OND [?]:	No
Suicide Risk [?]:	No
Received Homeless Services (last 12 months) [?]:	Yes
Home-Based Primary Care [?]:	No
Palliative Care [?]:	No
Home Telehealth Participant [?]:	No
Heart Failure Dx with Admission in Last 30 Days [?]:	No Admissions Last 30 Days
Northeast Cancer Registry Records [?]:	No records found

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Risk Characteristics

Hide Page Overview... 

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Hide Risk Indicators... 

Assign Clinical Priority & High Risk Flag

[View History](#)



CARE ASSESSMENT NEEDS SCORES [?]

(CAN) Scores (1-99):



Admission

Combined Event
(Death or Admission)

90 day Score:

97 (19%) 97 (20%) 

1 year Score:

97 (42%) 97 (53%) 

Clinical Priority (1-10) [?]:

7 

Manual High-Risk Flag [?]:

Yes

Risk Flag Reason [?]:

Mild dementia

National BDOC [?]: 3

Polypharmacy Count [?]: 16

Pain Scale [?]: 0

OEF/OIF/OND [?]: No

Suicide Risk [?]: No

Received Homeless Services (last 12 months) [?]: NULL

Home-Based Primary Care [?]: No

Home Telehealth Participant [?]: No

Palliative Care [?]: No

Hospice Care [?]: No

Spinal Cord Injury [?]: NOT APPLICABLE

Agent Orange Exposure Documented [?]: No

Heart Failure Re-Admission 30-day Watch [?]: No

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Risk Characteristics

Hide Key Clinical Risk Factors (for the past 12 months) ...

Number of ER Visits (last 12 months) [?]: 5

Number of Hospital Discharges (last 12 months) [?]: 4

[?] TOOLTIP FOR HOMELESS ITEM

Source: PCP Panel Cube. Updated: Nightly.
 This field indicates if a patient has received any
 VA homeless services in the last 12 months.

Received Homeless Services (last 12 months) [?]: Yes

Home-Based Primary Care [?]: No

Palliative Care [?]: No

Home Telehealth Participant [?]: No

Heart Failure Dx with Admission in Last 30 Days [?]: No Admissions Last 30 Days

Northeast Cancer Registry Records [?]: No records found

Palliative Care [?]: No

Home Telehealth Participant [?]: No

Heart Failure Dx with Admission in Last 30 Days [?]: No Admissions Last 30 Days

Northeast Cancer Registry Records [?]: No records found

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Risk Characteristics

Hide Page Overview... 

Risk Characteristics overview and page directions will be pulled from database.

Hide Key Cost Risk Factors (for the past 12 months) ... 

MCA Cost [?]:	\$13,077.97
Beneficiary Travel Costs [?]:	\$0.00
FEE Costs (Disbursed Amount) [?]:	No Records Found
FEE Costs (Payment Amount) [?]:	No Records Found
VERA Classification Last Fiscal Year [?]:	5: Multiple Problem
VERA Classification Current Fiscal Year [?]:	2: Basic Medical/Ht, Lung, GI

Number of Hospital Discharges (last 12 months) [?]:	1
National BDOC [?]:	4
Polypharmacy Count [?]:	0
Pain Scale [?]:	6
OEF/OIF/OND [?]:	No
Suicide Risk [?]:	No
Received Homeless Services (last 12 months) [?]:	Yes
Home-Based Primary Care [?]:	No
Palliative Care [?]:	No
Home Telehealth Participant [?]:	No
Heart Failure Dx with Admission in Last 30 Days [?]:	No Admissions Last 30 Days
Northeast Cancer Registry Records [?]:	No records found

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Team Information

Patient Information

[Risk Characteristics](#)
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Hide Page Overview... (X)

Team Information Overview Text will go here, no need to add directly to database or page just use this front end and all will populate correctly.

PACT Team

Team Name	Team Member Name	Position [?]	Role [?]	Location [?]	Date Assigned [?]	Office Phone	Digital Pager	Email Address	Receive PCAS Notifications
CBC WILLIMANTIC LIMA *WH*	MEMBER NAME	MEDICAL SUPPORT ASSISTANT	PC ASSIGNMENT	689GC	07/12/2012	860-450-			Yes
CBC WILLIMANTIC LIMA *WH*	MEMBER NAME	REGISTERED NURSE	PC ASSIGNMENT	689GC	07/12/2012	860-450-			No (01/03/2015)
CBC WILLIMANTIC LIMA *WH*	MEMBER NAME	PHYSICIAN	PC ASSIGNMENT	689GC	07/12/2012	860450			Yes
CBC WILLIMANTIC LIMA *WH*	MEMBER NAME	REGISTERED NURSE	PC ASSIGNMENT	689GC	07/12/2012	2140			Yes
CBC WILLIMANTIC LIMA *WH*	MEMBER NAME	HEALTH TECHNICIAN	PC ASSIGNMENT	689GC	07/12/2012	860-450-			Yes

CBC WILLIMANTIC LIMA *WH*

MEMBER NAME

HEALTH
TECHNICIANPC
ASSIGNMENT

689GC

07/12/2012

860-450-

Yes

Home/Community Provider Information

No Home/Community Provider Information Found

Add Home/Community Provider

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[Risk Characteristics](#)

Outpatient Encounters (Last 12 Months)

Hide Page Overview... 

FILTER

Start Date:



End Date:



Diagnosis (keyword or ICD):

-- Select One --



Go

FILTER

Start Date:



End Date:



Go

Diagnosis (keyword or ICD):

-- Select One --



Go

Stop Code:

-- Select One --



Go

Type:

-- Choose Type --



Go

01/17/2014	Name	MEDICAL	HOSPITAL			750.7: BACTEREMIA	FEE
01/21/2014	Name	Specialty Care	CONNECTICUT HCS	330	HEM ONC INFUSION CHAIR 2 WHAV	161.9: MALIGNANT NEOPLASM OF LARYNX, UNSPECIFIED	VHA
01/24/2014	Name	Diagnostic	CONNECTICUT HCS	108	LAB DIV 689 OOS ID 108		VHA
01/28/2014	Name	Specialty Care	CONNECTICUT HCS	330	HEM ONC INFUSION CHAIR 2 WHAV	161.9: MALIGNANT NEOPLASM OF LARYNX, UNSPECIFIED	VHA
01/28/2014	Name	Ancillary	CONNECTICUT HCS	160	INPT PHARM ADMISSION WHAV-X	V58.83: ENCOUNTER FOR THERAPEUTIC DRUG MONITORING	VHA
01/28/2014	Name	ER	SMITH HOSPITAL			786.05: SHORTNESS OF BREATH	FEE
01/31/2014	Name	Diagnostic	CONNECTICUT HCS	108	LAB DIV 689 OOS ID 108		VHA

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Inpatient Discharges (Last 12 Months)

[Hide Page Overview...](#)

FILTER

Start Date:



End Date:



Go

Diagnosis (keyword or ICD):

-- Select One --

Go

Type:

-- Choose Type --

Go

<u>Discharge Date</u>	<u>Facility Location</u>	<u>Discharge Diagnosis</u>	<u>Discharge Case Manager/Nurse</u>	<u>Type</u>
01/05/2015	WEST HAVEN	188.4: MALIGNANT NEOPLASM OF POSTERIOR WALL OF URINARY BLADDER	PROVIDER NAME	VA
12/12/2014	SMITH HOSPITAL	458.0: ORTHOSTATIC HYPOTENSION		FEE
08/01/2014	WEST HAVEN	997.5: URINARY COMPLICATIONS, NOT ELSEWHERE CLASSIFIED	PROVIDER NAME	VA
		188.4: MALIGNANT NEOPLASM OF		

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Health Factors (Last 12 Months)

Hide Page Overview... 


Team Information Overview Text will go here, no need to add directly to database or page just use this front end and all will populate correctly.

Patient Name: SSN: DOB:

FILTER

Start Date:  End Date:  Health Factor Type: Health Factor (text search):

FILTER

Start Date:  End Date:  Health Factor Type: Health Factor (text search):

Date/Time	Health Factor Type	Comment
11/7/2014 8:30	HIV TEST - DECLINED	
11/7/2014 9:30	NOT REGISTERED FOR MHV	
11/14/2014 11:10	V1 - ADVANCE DIRECTIVE NOT AT VAMC	patient will bring in a copy at next visit
1/15/2015 15:25	NEGATIVE - HAS STABLE HOUSING	

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VA and Non-VA Medications

Hide Page Overview... ⓘ

Team Information Overview Text will go here, no need to add directly to database or page just use this front end and all will populate correctly.

Patient Name: SSN: DOB:

Filter Medication Name: or -- Choose Name --

Prescribing Date: Start Date: End Date:

Status: -- Select One --

Hide Patient VA Meds ... ⓘ

Medication	Dosage	Med Start Date	Status	Expiration Date	Refill Date	Renewal Date	Prescribing Location
ZOLPIDEM	10 MG	10/1/2014 10:22:00 AM	ACTIVE		9/29/2014 12:00:00 AM	7/24/2014 12:00:00 AM	VACT-NEWINGTON,CT
FERROUS SULFATE	325 MG	9/26/2014 12:02:20 PM	EXPIRED	10/30/2016 12:00:00 AM	9/15/2014 12:00:00 AM	10/8/2013 12:00:00 AM	VACT-WEST HAVEN,CT
GABAPENTIN	300 MG	2/25/2013 1:13:41 PM	EXPIRED	9/30/2014 12:00:00 AM	2/22/2013 12:00:00 AM	2/22/2013 12:00:00 AM	VACT-WEST HAVEN,CT

TRAMADOL	50 MG	10:20:14 AM	PROVIDER		12:00:00 AM	12:00:00 AM	12:00:00 AM	HAVEN,CT
LORAZEPAM	1 MG	2/25/2013 1:13:42 PM	EXPIRED		9/30/2014 12:00:00 AM	2/22/2013 12:00:00 AM	2/22/2013 12:00:00 AM	VACT-WEST HAVEN,CT
LORAZEPAM	1 MG	11/12/2014 12:05:00 PM	DISCONTINUED			11/10/2014 12:00:00 AM	5/29/2014 12:00:00 AM	VACT-NEWINGTON,CT

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[Patient Consults](#)[TASKS and REMINDERS](#)**Patient Consults**Hide Page Overview... 

Consults for patient, select consult for more details.

Patient Name: Test Veteran

SSN: XXXX DOB: 00/00/0000

Filter:		
Filter By CPRS Status:	-- Choose --	Go
Filter By Request Date:	Start Date: <input type="text"/>	End Date: <input type="text"/> Go
Clear Filter		

	To Request Service Name	Request Date	Urgency	CPRS Status
Select	O/RHEUMATOLOGY OPT	02/06/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/GASTRO COLONOSCOPY	02/06/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	EYEGLOSS REQUEST - OMAHA	02/19/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	PROSTHETICS REQUEST - OMAHA	03/26/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/OCCUPATIONAL THERAPY	03/26/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/PHYSICAL THERAPY OUTPATIENT	03/26/2013	GMRCURGENCY - ROUTINE	CANCELLED
Select	PROSTHETICS REQUEST - OMAHA	04/05/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	PROSTHETICS REQUEST - OMAHA	04/05/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/GASTRO COLONOSCOPY	05/07/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/GENERAL SURGERY HEMORRHOIDS	05/07/2013	GMRCURGENCY - ROUTINE	COMPLETE
Select	O/ENT OTHER	05/07/2013	GMRCURGENCY - WITHIN 1 MONTH	COMPLETE
Select	O/OPHTHALMOLOGY OPT OTHER	06/25/2013	GMRCURGENCY - ROUTINE	CANCELLED
Select	O/UROLOGY HEMATURIA	01/07/2014	GMRCURGENCY - ROUTINE	SCHEDULED

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Filter List By Patient:		Or By Risk Score:
Filter By Name:	<input type="text"/> <input type="button" value="Go"/>	Manual High Risk Flag
Search By Last 4 SSN:	<input type="text"/> <input type="button" value="Go"/>	
Filter By CPRS Status:	<input type="text" value="ACTIVE"/> <input type="button" value="Go"/>	
Filter By Request Date:	Start Date: <input type="text"/> <input type="button" value="Go"/> End Date: <input type="text"/> <input type="button" value="Go"/>	
<input type="button" value="Clear Filter"/>		

	Last 4 SSN	Patient Name	High Risk Flag	Request Date Time	Request Service Name	CPRS Status	Team
Select	1234	Patient Name		04 Dec 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		20 Nov 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		17 Jan 2014	O/ENT VERTIGO/DIZZINESS	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		22 Nov 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		22 Oct 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		15 Jan 2014	O/NON VA CARE ACUPUNCTURE	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		24 Dec 2013	O/NON VA CARE PHYSICAL THERAPY	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		18 Nov 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		02 Dec 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		18 Nov 2013	O/GASTRO COLONOSCOPY	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		27 Dec 2013	O/NON VA CARE EMG	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		14 Jan 2014	O/PHARMACY MEDICATION THERAPY MANAGEMENT	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		17 Jan 2014	O/PHARMACY MEDICATION THERAPY MANAGEMENT	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		14 Jan 2014	O/NON VA CARE CARDIOLOGY ECHO CONSULT	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		10 Jan 2014	O/NON VA CARE DERMATOLOGY	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		10 Jan 2014	O/CCHT	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		06 Dec 2013	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)
Select	1234	Patient Name		07 Jan 2014	O/NON VA CARE PAIN REFERRAL	ACTIVE	OMA PACT 003 (636)

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Manage Patients

[Hide Page Overview... \(?\)](#)

This will be a description/overview of the Manage Patients page. This is database driven so any changes will be on the database side, no need to update the application. Neat! Test

Filter Panel By Patient(s) or Appointment:		Or Filter Panel Based on Risk Characteristics:
Search By Name:	<input type="text"/> <input type="button" value="Go"/>	Manual High Risk Flag
Search By Last 4 SSN:	<input type="text"/> <input type="button" value="Go"/>	Top CAN Scores (1yr. death or admission model)
Search By Next Appointment Date:	Start Date: <input type="text"/> <input type="button" value="Go"/> End Date: <input type="text"/> <input type="button" value="Go"/>	Top Clinical Priority
		Received Homeless Services (last 12 Months)
		Suicide Risk
		Home-Based Primary Care
		Home Telehealth Participants
<input type="button" value="Clear Filter"/>		

Last 4 SSN	Patient Name	CAN	Clinical Priority	High Risk	Risk Type	Last Appointment	Ne...
						01 Jul 2014	28 Sep

Tasks	Active & Pending Consults
	<u>5</u>

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Tasks/Notifications

[CHECK YOUR TEAM NOTIFICATION SETTINGS](#)

Hide Page Overview...

Task and Notification page overview goes here.

Tasks

Filter Tasks By:

Status

-- Select Status --

Assigned To:

-- Select Assigned To --

Type:

-- Select Type --

	Assigned To	Task Due Date	Task Type	Task Requested Date	Last Follow-Up Date	Task Priority	Status	
Select	JANE DOE	03/25/2015	Call Patient	03/19/2015	03/20/2015	URGENT	Complete	Delete
Select	JOHN DOE	03/24/2015	Check Lab Results	03/19/2015		Medium	On Hold	Delete
Select	JANE DOE	03/25/2015	Letter to Patient	03/19/2015		HIGH	Pending	Delete
Select	JOHN DOE	03/23/2015	Check Screening Results	03/19/2015		Low	On Hold	Delete

Untitled - Message (HTML)

File Message Insert Options Format Text Review

Paste Clipboard Basic Text Names Attach File Attach Item Signature Follow Up High Importance Low Importance Tags Zoom

To... Reminder Person

Cc...

Subject: PCAS TASKS DUE

Send

Dear Reminder Person,

This is a notification from the Patient Care Assessment System that you have TASKS DUE in the next three days.

- [2 URGENT TASKS \(please click here to address these\)](#)
- [3 Medium Priority Tasks](#)

Of these,

- [2 is Call Patient](#)
- [1 is Service F/U](#)
- [1 is Letter to Patient](#)

Please use the direct links above, or [CLICK HERE TO ACCESS PCAS.](#)

(Please note: you must be on the VA network)

Sincerely,
Patient Care Assessment System

NOTICE: THIS EMAIL IS INTENDED ONLY FOR THE ORIGINAL RECIPIENT AND SHOULD NOT BE COPIED OR FORWARDED.

PATIENT CARE ASSESSMENT SYSTEM

PCAS

DEMO

310



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CASE MANAGEMENT FLAGS (Past 12 months)

E.g.,

- Visits related to Hospice,
- Purchased Skilled Home Care,
- Non VA Care Coordination,
- Caregiver Program,
- Mental Health Case Management, etc...

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Upcoming Appointm

FILTER Start Date:

Appointment Type: -- Se

Appt Date/Time	Facility
03/21/2017	TAMPA VAM
04/16/2017	TAMPA VAM
05/01/2017	TAMPA VAM
06/01/2017	TAMPA VAM
08/05/2017	TAMPA VAM
09/12/2017	TAMPA VAM

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One -- Request Type: -- Choose Type --

One -- Follow-Up Visit: -- Select One --

Stop Code (Visits Only)	Scheduling Request Type	Length
35	O: Other Than Next Available	30
36	C: Clinician Req	30
39	P: Patient Req	20
32	A: AutoRebook	15
315	N: Next Available Appt	30
	O: Other Than Next Available	60

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Please select the situation or background that applies to this note:

- Functional Status Concerns
- Social Issues
- Exacerbation of chronic disease state
- Development of new chronic illness
- Hospitalization
- Emergency of urgent care visit
- Newly Homeless
- Other (please include in the text box)

Note Comments:

SITUATION / BACKGROUND UPDATE CONCERNING:
Functional Status Concerns
Social Issues

... (Add manual note text)...

View Previous Notes:

- 22 Feb 2017 Functional Status Concerns
- 27 Feb 2017 New Chronic Illness
Hospitalization
- 03 Mar 2017 Functional Status Concerns

Save

Cancel

VIEW



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TASKS and REMINDERS

CARE PLAN NOTE

Learning Preferences

Patient Name: Test Veteran

SSN: XXX

DOB: 00/00/000

*Focus on special needs

Learning Preferences

Vision/Hearing/Literacy

Communication Preferences

Educational Assessment

Style of Learning and Barriers

Patient, spouse, significant Other is ready to learn:

- Yes
- No

Requires Special Aids to Comprehend:

- Yes
- No

If "Yes" describe special aides required:

Text input field with up/down arrows

Patient/Caregiver is Able to Read and Write:

- Yes
- No

Styles of Learning Preferred:

Dropdown menu with options: Reading, Discussion, Lecture

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THE COMPONENTS OF PROACTIVE HEALTH AND WELL-BEING



Patient Health Inventory
From: Office of Patient Centered Care

Personal Health Inventory
Professional Care
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CARE PLAN NOTE

Assessment and Goals

Patient Name: Test Veteran

SSN: .XXX

DOB: 00/00/000

Problem Identification

< date last modified >

[View History of Problem Identification](#)

ASSESSMENT & GOALS

Problem Identification

Functional Status Assessment

ADLs, IADLs, Pain, Mental Health, Mobility Care Plan Goals

Functional Status Assessment

Fall Risk:

No-Risk

Low-Risk

High-Risk

[View Morse Scale](#)

CARE PLAN NOTE

Patient Name: Test Veteran

SSN: XXX

DOB: 00/00/000

Please select the information to include in this note:

- Most recent CAN scores
- PCAS Clinical Priority score and description
- Next 3 appointments
- Pending or active consults
- Most recent Patient Note
- Learning Preferences
- Patient Health Inventory
- Assessment
- Goals
- Current tasks associated with this patient's care

View Previous CARE PLAN Notes:

- 22 Feb 2017 01:22A
- 27 Feb 2017 04:36P
- 03 Mar 2017 12:11P

Note Text:

PCAS Care Plan Note

****Most Recent CAN Scores****
 90-day Admission 85 (5%)
 1 yr Admission 80 (15%)
 90-day Admission or Death 85 (7%)
 1 yr Admission or Death 90 (24%)

****PCAS Clinical Priority Score****
 10; Statistical High Risk, Dialysis, Cancer

... (Add manual note text)...

VIEW

Save Cancel

SEND TO CPRS

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Non-VA Community Care Collaboration

- NVCC Team Access to PCAS (VA Providers)
- Care Planning Tasks enhancements
- Linking Consults to Appointments and Tasks

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Query

News

QUERY and REPORT FUNCTIONALITY

COMBINE things like....

- Appointment Date Range
- Diagnosis Lookup
- Risk Characteristics or Group-Level Risk
- Combine Clinical Criteria – beyond page filters

POLL

What PCAS function is most important to you?

- A. Viewing VA and Non-VA data in one summary location
- B. Quickly locating patients in a panel based on various risk characteristics
- C. Team-based tasking
- D. Creating a patient-centered plan and writing to CPRS
- E. Something else

TEAM

- **Steve Krysiak**
 - **Sophie Lo**
 - **Will Green**
 - **Craig Kreisler**
 - **SP Thakur**

 - **Stephan Fihn, MD MPH**
- ABI Colleagues and Collaborators
 - PACT Nurse and Provider Members of Requirements Team
 - ONS and PCS Implementation Leadership Team
 - PCAS Champions

THANK YOU

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PCAS URL: <https://secure.vssc.med.va.gov/PCAS>