

VA GERIATRIC SCHOLARS QUALITY IMPROVEMENT DASHBOARDS:

USING INFORMATICS TO FACILITATE CHANGE

Zach Burningham, PhD
VA Salt Lake City HCS IDEAS COIN

TODAY'S PRESENTATION

- Introduction to the VA Geriatric Scholars Program
- Dashboard Development Process
- Dashboards At-A-Glance
- Data Extraction Strategy
- Core Components
- Usability Testing
- Future Direction

VA GERIATRIC SCHOLARS PROGRAM

A workforce development program designed to enhance the skills and competencies of VA clinicians who provide healthcare in primary care teams

Eligibility:

- Employed at VA
- Primary Care Provider (MD, DO, PA, NP)
- Primary Care Team
 - Clinical Pharmacist
 - Social Worker



Geriatrics and Extended Care

CORE PROGRAM COMPONENTS

Intensive Course in
Geriatric Medicine

Workshop on
Quality
Improvement

Quality
Improvement
Project

INTENSIVE COURSE

Intensive Course in Geriatric Medicine

- 30 Hours CME/CEU
- Geriatric Syndrome Review
 - Dementia
 - Falls
 - Incontinence
 - Pain Management
 - Osteoporosis
- Appropriate Prescribing/Medication Safety
- Screening & Preventive Health Guidelines
 - Vaccinations
 - Cancer

Workshop on Quality Improvement

- 7.5 Hours CME/CEU
- Learning Objective: How to Plan/Implement QI
- Steps
 1. Assemble Team
 2. Identify Clinical Problem
 3. Gather Baseline Data
 4. Formal Aim Statement
 5. Map Current Process
 6. Brainstorm Potential Change Ideas
 7. Develop Improvement Measures
 8. Plan 1st Cycle of Change

QI PROJECT

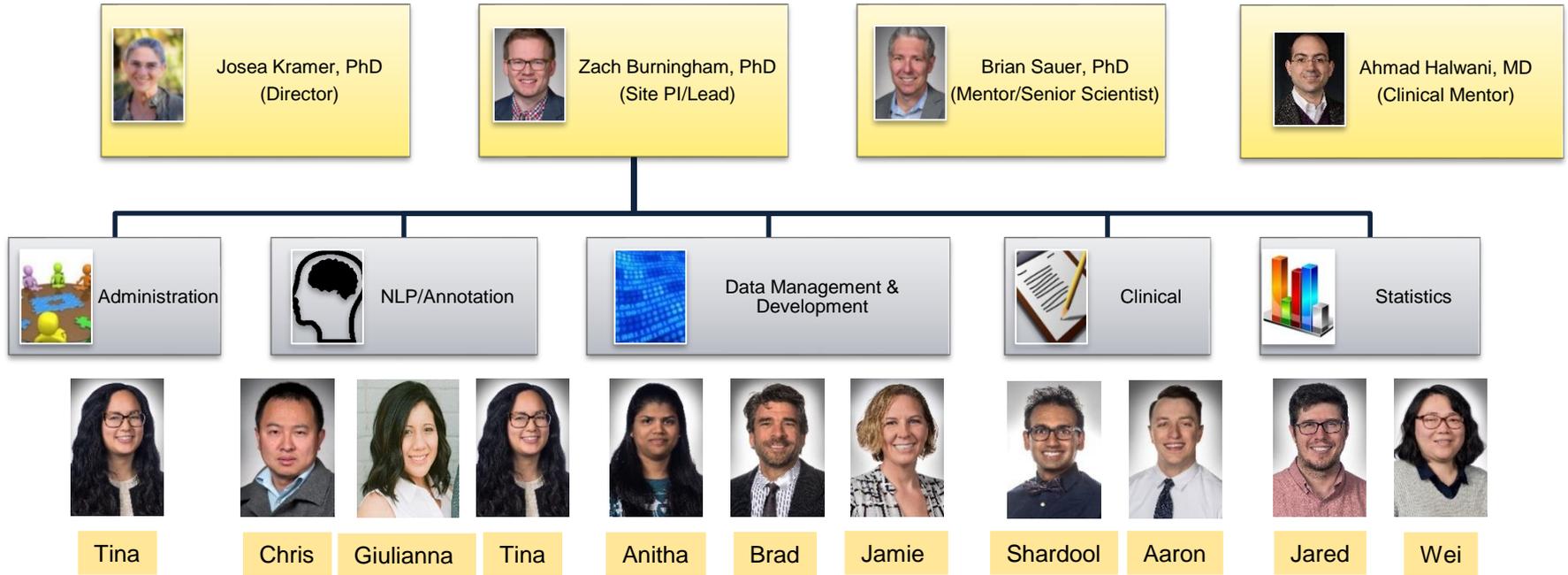
Quality Improvement Project

- Small/Micro
 - Patient Panel
 - <2 Hours per Week
- Coach Assigned
- Final Deliverable: Poster/Storyboard

OUR ROLE

- Informatics Support Service
 - Reduce Drop Outs
- How? Build a Suite of Dashboards that would...
 - Reduce the Burden of Collecting Baseline Data
 - Provide an Interactive and Near-Real Time Experience
 - Track QI Process and Outcome Measures

GERIATRIC SCHOLARS INFORMATICS TEAM



Regina Richter Lagha, PhD
Lead Usability Methodologist



COLLEGE OF NURSING

Carol Callaway-Lane, DNP
QI & Coach Director

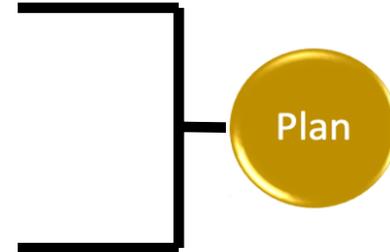
DASHBOARD DEVELOPMENT PROCESS

1. Identify Target Geriatric Clinical Practice Guideline
 - Review Curriculum
 - Review Previous QI Projects
2. Identify Subject Matter Expert (SME)
3. Conception: Prototype w/ Core Components
 - Operationalize Clinical Concepts
 - Visualize
 - Testing
4. SME Review
5. Usability Testing
6. Release/Reveal
 - Changes Don't Stop Here

DASHBOARD DEVELOPMENT PROCESS

1. Identify Target Geriatric Clinical Practice Guideline

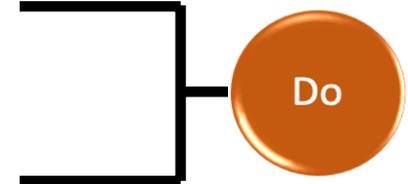
- Review Curriculum
- Review Previous QI Projects



2. Identify Subject Matter Expert (SME)

3. Conception: Prototype w/ Core Components

- Operationalize Clinical Concepts
- Visualize
- Testing

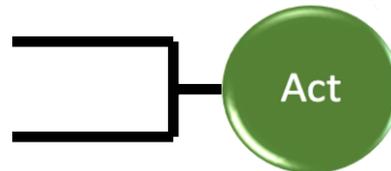
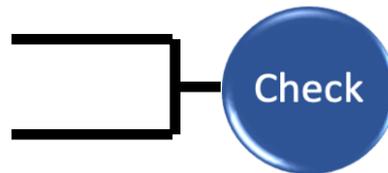


4. SME Review

5. Usability Testing

6. Release/Reveal

- Changes Don't Stop Here



Process Framework:
Agile vs. Waterfall

SUITE OF DASHBOARDS



Beers Report Provider Summary View

Report User: VHA19\VHASLCLBumiz

Data Last Uploaded: 5/9/2019

[Individual Patient
Lookup](#)

[User Guide \(click here\)](#)

[Data Definitions](#) [Documentation](#)

| | Current Panel Size 65+ Years of Age | 2019 AGS General Beers Criteria | | | | 2019 AGS B |
|---|-------------------------------------|--|-------|--|------|---|
| | | # of Panel, 65+ years of age, on a Potentially Inappropriate Medication (PIM) for Older Adults | | # of Meds Issued in the Last 6m that Qualify as PIMs | | # of Panel, 65+ year |
| | | N | % | N | % | Failure on a Potent Medication (PIM) th this co |
| ALL GERIATRIC SCHOLARS | 108,070 | 46,890 | 43.4 | 46,681 | 8.8 | 615 |
| <p>Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary</p> | 42 | 26 <input type="checkbox"/> # of Panel by Therapeutic Class | 61.90 | 11 | 2.8 | 2 |
| <p>Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary</p> | 150 | 74 <input type="checkbox"/> # of Panel by Therapeutic Class | 49.33 | 29 | 11.4 | 1 |
| <p>Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary</p> | 26 | 10 <input type="checkbox"/> # of Panel by Therapeutic Class | 38.46 | 16 | 3.8 | 0 |

SUITE OF DASHBOARDS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report Provider Summary View

Report User: VHA19VHASLCLBumiZ

[User Guide \(click here\)](#)

Report Generated Date: 5/16/2019

[Data Definitions Documentation \(click here\)](#)

| | Current Panel Size 65+ Years of Age | # of Panel Hospitalized due to a ACSC in the Last Year | | % of Panel Hospitalized for an ACSC w/out Primary Care Follow-Up Post Discharge | Timeliness of Follow-Up: Average # of Days Between ACSC Hospitalizations and Primary Care Encounters, Post Discharge | ACSC Hospitalization in the last 7 days? | Percentage of Hospitalizations by Ambul | | | |
|------------------------|--|---|--------------------------|--|---|--|---|------------------------|--------|-----------------------------|
| | N | N | # Unique Admissions | % | Avg (days) | | COPD | Bacterial Pneumonia | Asthma | Congestive Heart Failure |
| ALL GERIATRIC SCHOLARS | 108,309 | 1,386 | 1,998 | 8.6 | 15 | | 32.7 | 19.7 | 0.9 | 29.1 |
| | 42 | 1 | 1 Trend | 0.0 | 3 | --- | 0.0 | 0.0 | 0.0 | 100.0 |
| | 151 | 2 | 6 Trend | 0.0 | 53 | --- | 0.0 | 36.8 | 0.0 | 26.3 |
| | 26 | 0 | 0 Trend | 0.0 | NA | --- | 0.0 | 0.0 | 0.0 | 0.0 |
| | 37 | 0 | 0 Trend | 0.0 | NA | --- | 0.0 | 0.0 | 0.0 | 0.0 |
| | 382 | 2 | 3 Trend | 0.0 | 39 | --- | 0.0 | 100.0 | 0.0 | 0.0 |
| | 34 | 1 | 2 Trend | 0.0 | 2 | --- | 100.0 | 0.0 | 0.0 | 0.0 |
| | 33 | 2 | 3 Trend | 0.0 | 2 | --- | 0.0 | 0.0 | 0.0 | 66.7 |
| | 691 | 2 | 2 Trend | 50.0 | 2 | --- | 64.3 | 0.0 | 0.0 | 0.0 |
| | 586 | 1 | 2 Trend | 0.0 | 1 | --- | 0.0 | 0.0 | 0.0 | 100.0 |
| | 324 | 3 | 12 Trend | 0.0 | 27 | --- | 55.4 | 44.6 | 0.0 | 0.0 |
| | 266 | 5 | 6 Trend | 0.0 | 32 | --- | 14.7 | 14.7 | 0.0 | 17.6 |
| | 56 | 3 | 3 Trend | 0.0 | 4 | --- | 0.0 | 0.0 | 0.0 | 50.0 |
| | 591 | 10 | 18 Trend | 0.0 | 11 | --- | 45.3 | 21.6 | 0.0 | 33.1 |
| | 35 | 0 | 0 Trend | 0.0 | NA | --- | 0.0 | 0.0 | 0.0 | 0.0 |
| | 40 | 7 | 14 Trend | 0.0 | 7 | --- | 0.6 | 18.5 | 0.0 | 78.1 |
| | 437 | 25 | 38 Trend | 56.0 | 28 | --- | 9.7 | 7.1 | 0.0 | 79.7 |

SUITE OF DASHBOARDS



Psychiatric Hospitalization Risk Report Provider Summary

Geriatric Scholars Program

Current Report User: VHA19\VHASLCCBurniz

Report Generated Date: 5/11/2019 2:00:10 AM

[User Guide \(click here\)](#)

[Data Definitions Documentation \(click here\)](#)

| Provider | Current Patient Panel Information | | | | Key Performance Benchmarks | | | | |
|------------------------|-----------------------------------|------------------|--------------------|---|--|--|--|---|---|
| | Panel Size | Patients Age 65+ | Population At Risk | Average Risk Percent of a Psychiatric Hospitalization in the Next 90 Days | # of Patients and % of panel at risk: WITHOUT a MH referral / encounter in the last year | # of Patients and % of panel at risk: WITHOUT a PTSD assessment / screening in the last year (PCLC, PCLM, PC-PTSD) | # of Patients and % of panel at risk: WITHOUT a Alcohol assessment / screening in the last year (AUDC) | # of Patients and % of panel at risk: WITHOUT a substance abuse assessment done in the last year (BAM, BAM-R, BAM-IOP, BAM-C) | # of Patients and % of panel at risk: WITHOUT a depression screening / assessment done in the last year (BDI2, PHQ9, PHQ-2) |
| All Geriatric Scholars | 178,799 | 108,119 | 47,265 (26.4%) | 4.1% | 27,864 | 39,505 | 5,563 | 45,814 | 28,523 |
| | 45 | 42 | 34 (75.6%) | 5.4% | 25 (73.5%) | 27 (79.4%) | 0 (0.0%) | 34 (100.0%) | 7 (20.6%) |
| | 779 | 151 | 69 (8.9%) | 0.4% | 45 (65.2%) | 35 (50.7%) | 16 (23.2%) | 66 (95.7%) | 31 (44.9%) |
| | 31 | 26 | 22 (71%) | 4.4% | 16 (72.7%) | 15 (68.2%) | 15 (68.2%) | 22 (100.0%) | 15 (68.2%) |
| | 40 | 38 | 34 (85%) | 3.1% | 21 (61.8%) | 25 (73.5%) | 3 (8.8%) | 34 (100.0%) | 19 (55.9%) |
| | 606 | 386 | 130 (21.5%) | 0.4% | 103 (79.2%) | 113 (86.9%) | 13 (10.0%) | 130 (100.0%) | 72 (55.4%) |
| | 39 | 34 | 23 (59%) | 1.7% | 18 (78.3%) | 15 (65.2%) | 3 (13.0%) | 23 (100.0%) | 20 (87.0%) |
| | 38 | 33 | 28 (73.7%) | 7.9% | 0 (0.0%) | 27 (96.4%) | 3 (10.7%) | 28 (100.0%) | 13 (46.4%) |
| | 1,552 | 692 | 270 (17.4%) | 1.2% | 138 (51.1%) | 248 (91.9%) | 54 (20.0%) | 270 (100.0%) | 186 (68.9%) |
| | 795 | 587 | 229 (28.8%) | 0.5% | 76 (33.2%) | 209 (91.3%) | 31 (13.5%) | 229 (100.0%) | 157 (68.6%) |
| | 628 | 321 | 107 (17%) | 2% | 63 (58.9%) | 97 (90.7%) | 9 (8.4%) | 107 (100.0%) | 69 (64.5%) |
| | 763 | 267 | 188 (24.6%) | 11.2% | 49 (26.1%) | 137 (72.9%) | 23 (12.2%) | 181 (96.3%) | 81 (43.1%) |
| | 58 | 56 | 46 (79.3%) | 1.3% | 35 (76.1%) | 39 (84.8%) | 5 (10.9%) | 46 (100.0%) | 26 (56.5%) |
| | 910 | 592 | 267 (29.3%) | 2% | 195 (73.0%) | 241 (90.3%) | 32 (12.0%) | 267 (100.0%) | 176 (65.9%) |
| | 51 | 34 | 22 (43.1%) | 7.9% | 17 (77.3%) | 16 (72.7%) | 0 (0.0%) | 22 (100.0%) | 7 (31.8%) |
| | 52 | 40 | 34 (65.4%) | 1.7% | 17 (50.0%) | 33 (97.1%) | 1 (2.9%) | 33 (97.1%) | 16 (47.1%) |
| | 439 | 438 | 203 (46.2%) | 3.9% | 134 (66.0%) | 88 (43.3%) | 19 (9.4%) | 203 (100.0%) | 70 (34.5%) |
| | 46 | 44 | 38 (82.6%) | 10.5% | 28 (73.7%) | 35 (92.1%) | 32 (84.2%) | 38 (100.0%) | 18 (47.4%) |
| | 561 | 374 | 203 (36.2%) | 0.8% | 117 (57.6%) | 173 (85.2%) | 29 (14.3%) | 202 (99.5%) | 118 (58.1%) |
| | 74 | 63 | 61 (82.4%) | 18.4% | 42 (68.9%) | 43 (70.5%) | 4 (6.6%) | 61 (100.0%) | 37 (60.7%) |



Choose VA

VA



U.S. Department of Veterans Affairs

SUITE OF DASHBOARDS



Osteoporosis Risk Assessment Report

Provider Summary View

User Guide

Data Definitions

[Additional Resources](#)

Click [here](#) for the ACOVE Osteoporosis Quality Indicators article

Click [here](#) for the Office of Rural Health OST Promising Practice Issue Brief

| Risk Factors | Scholar, Geriatric (Test)  (Click on graph to view CQI graph) | | | | All Geriatric Scholars |
|--|--|-------------------------------|----------------------|----------------------|------------------------|
| | Numerator (# Screened) | Denominator (# Panel At Risk) | % Screened | % Not Screened | % Screened |
| Total # Patients in Panel (Age 65+) | 737 | | | | |
| Any ACOVE Osteoporosis Risk Factor (see individual risk factors below) | 17 | 54 | 31% | 69% | 22% |
| Female (Age 65+) | 1 | 1 | 100% | 0% | 30% |
| Male, Hx of Chronic Oral Glucocorticoids (Age 65+) | 4 | 11 | 36% | 64% | 29% |
| Male w/ Hypogonadism (Age 65+) | 8 | 36 | 22% | 78% | 12% |
| Male w/ Primary Hyperparathyroidism (Age 65+) | 4 | 5 | 80% | 20% | 56% |
| Male, Hx of GnRH medication Use (Age 65+) | 0 | 0 | NA | NA | 30% |
| Hx of Hip Fracture (Age 65+) | 1 | 3 | 33% | 67% | 19% |
| Hx of Kyphoplasty/Vertebroplasty (Age 65+) | 0 | 1 | 0% | 100% | 46% |



VA HEALTH CARE Defining **EXCELLENCE** in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)



Choose **VA**

VA



U.S. Department of Veterans Affairs

SUITE OF DASHBOARDS



Fall Risk Assessment Report

Provider Summary View

Report User: VHA19\VHASLCBurnIZ

Data Last Refreshed: 5/16/2019 12:00:00 AM

| | Current Panel Size 65+ Years of Age | # of Panel w/ Evidence a Fall History has been Performed in the Last Year | | # of Panel w/ Evidence of a Fall in the Last Year | | # of Panel w/ Evidence of Action Taken (Among Those w/ a Fall in the Last Year) | | | | | | |
|-------------------------------|--|--|------|--|------|--|--------------------------|---------------------------------|---------------------------|---|------------------------------------|--|
| | N | N | % | N | % | Orthostatic Vital Signs | Functional Assessment | Gait & Balance Assessment | Neurologic Examination | Physical Performance Test & Evaluation | Referred to Physical Therapy | Referred to Occupational Therapy |
| ALL GERIATRIC SCHOLARS | 134,427 | 14,148 | 10.5 | 5,413 | 4.0 | 4,323 | 2,123 | 532 | 4,444 | 3,200 | 3,454 | 223 |
| | | # w/out Fall History: 120,304 | | | | | | | | | | |
| | 35 | 34 | 97.1 | 8 | 22.9 | 34 | 1 | 8 | 4 | 1 | 8 | 4 |
| | | # w/out Fall History: 1 | | 8 | | | | | | | | |
| | 39 | 23 | 59.0 | 13 | 33.3 | 23 | 16 | 13 | 12 | 16 | 13 | 12 |
| | | # w/out Fall History: 16 | | 13 | | | | | | | | |
| | 35 | 28 | 80.0 | 15 | 42.9 | 28 | 7 | 15 | 11 | 7 | 15 | 11 |
| | | # w/out Fall History: 7 | | 15 | | | | | | | | |
| | 624 | 8 | 1.3 | 10 | 1.6 | 8 | 616 | 10 | 5 | 616 | 10 | 5 |
| | | # w/out Fall History: 616 | | 10 | | | | | | | | |
| | 37 | 26 | 70.3 | 11 | 29.7 | 26 | 11 | 11 | 4 | 11 | 11 | 4 |
| | | # w/out Fall History: 11 | | 11 | | | | | | | | |
| | 28 | 22 | 78.6 | 4 | 14.3 | 22 | 6 | 4 | 2 | 6 | 4 | 2 |
| | | # w/out Fall History: 6 | | 4 | | | | | | | | |
| | 694 | 51 | 7.3 | 15 | 2.2 | 51 | 643 | 15 | 3 | 643 | 15 | 3 |
| | | # w/out Fall History: 643 | | 15 | | | | | | | | |
| | 598 | 169 | 28.3 | 16 | 2.7 | 169 | 429 | 16 | 6 | 429 | 16 | 6 |
| | | # w/out Fall History: 429 | | 16 | | | | | | | | |



Choose VA

VA



U.S. Department of Veterans Affairs

SUITE OF DASHBOARDS



Pneumococcal Vaccination Report Summary View

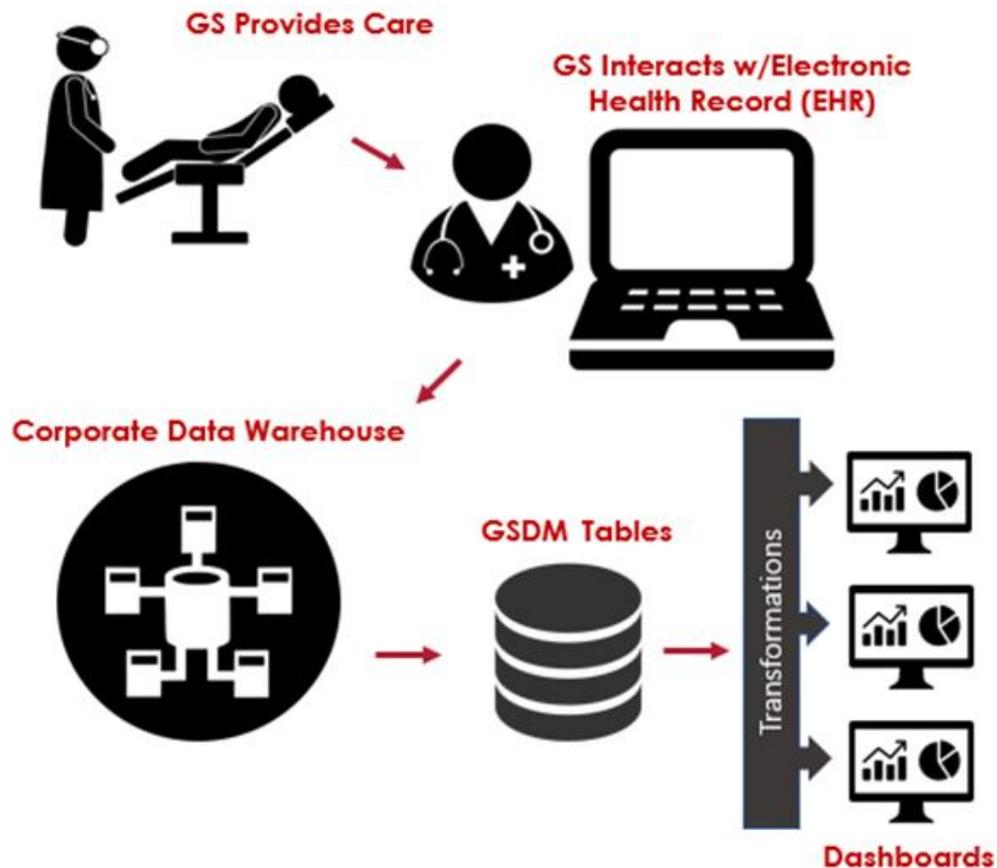
Report User: VHA19VHASLCLCBurniZ
Data Last Updated: 5/13/2019

[User Guide](#)
[Data Definitions](#)

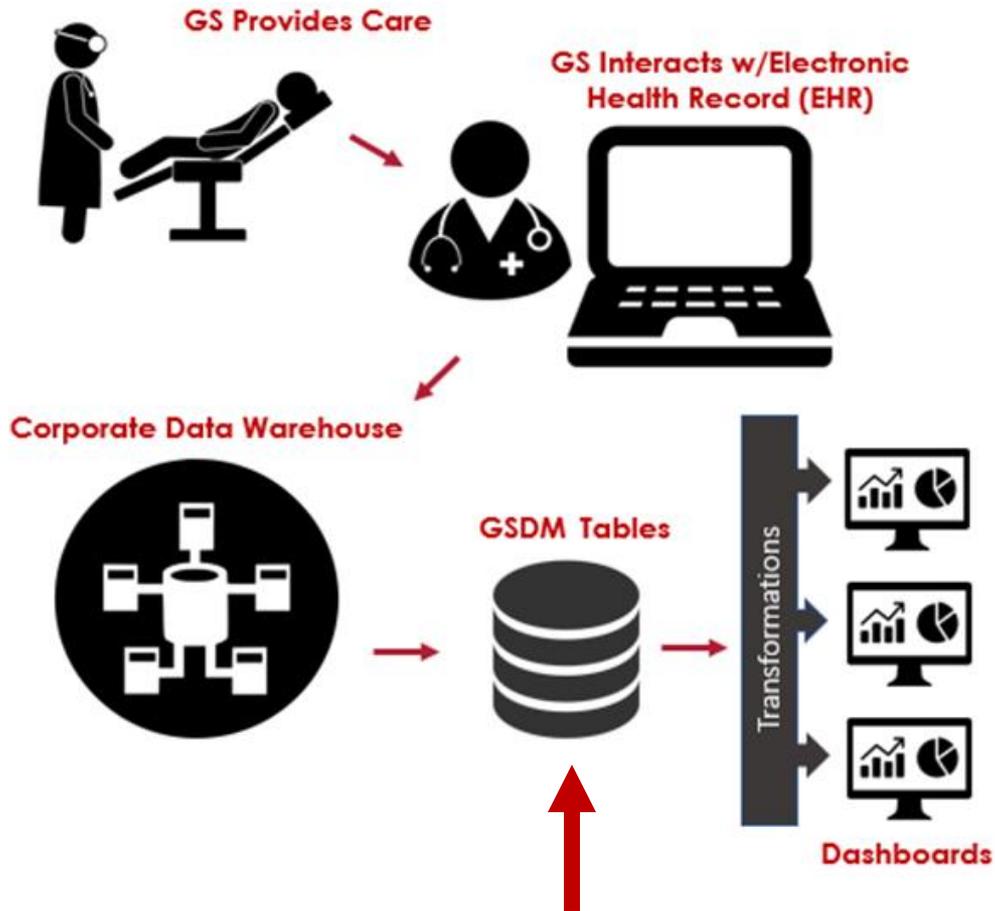
Urgency: High Medium Low
Trend: ↑ Up > 5% ↓ Down > 5% → 5% Same

| | # Patients 65+ | | | | # of Patient Panel, 65+ who have not received PCV13 or PPSV23, or whose vaccination history is unknown | | | # of Patient Panel, 65+ who have not received PCV13, but have received PPSV23 at or after age 65 | | | # of Patient Panel, 65+ who have received PCV13 at or after age 65, but have no evidence of PPSV23 | | | # of Patient Panel 65+ who have completed the Pneumococcal Immunization Series | | |
|------------------------|----------------|--------|------|--------------|--|------|--------------|--|------|--------------|--|------|--------------|--|---|--------------|
| | N | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend |
| All Geriatric Scholars | 108,287 | 16,143 | 14.9 | | 10,289 | 9.5 | | 8,150 | 7.5 | | 73,705 | 68.1 | | | | |
| | N | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | N | % | % 1 Yr Trend | | | |
| | 40 | 0 | 0.0 | | 3 | 7.5 | | 2 | 5.0 | | 35 | 87.5 | | | | |
| | 579 | 50 | 8.6 | | 45 | 7.8 | | 45 | 7.8 | | 439 | 75.8 | | | | |
| | 9 | 0 | 0.0 | | 2 | 22.2 | | 0 | 0.0 | | 7 | 77.8 | | | | |
| | 438 | 64 | 14.6 | | 31 | 7.1 | | 35 | 8.0 | | 308 | 70.3 | | | | |
| | 48 | 7 | 14.6 | | 2 | 4.2 | | 0 | 0.0 | | 39 | 81.3 | | | | |
| | 331 | 72 | 21.8 | | 33 | 10.0 | | 46 | 13.9 | | 180 | 54.4 | | | | |
| | 96 | 10 | 10.4 | | 3 | 3.1 | | 18 | 18.8 | | 65 | 67.7 | | | | |

DATA ARCHITECTURE: ELT APPROACH

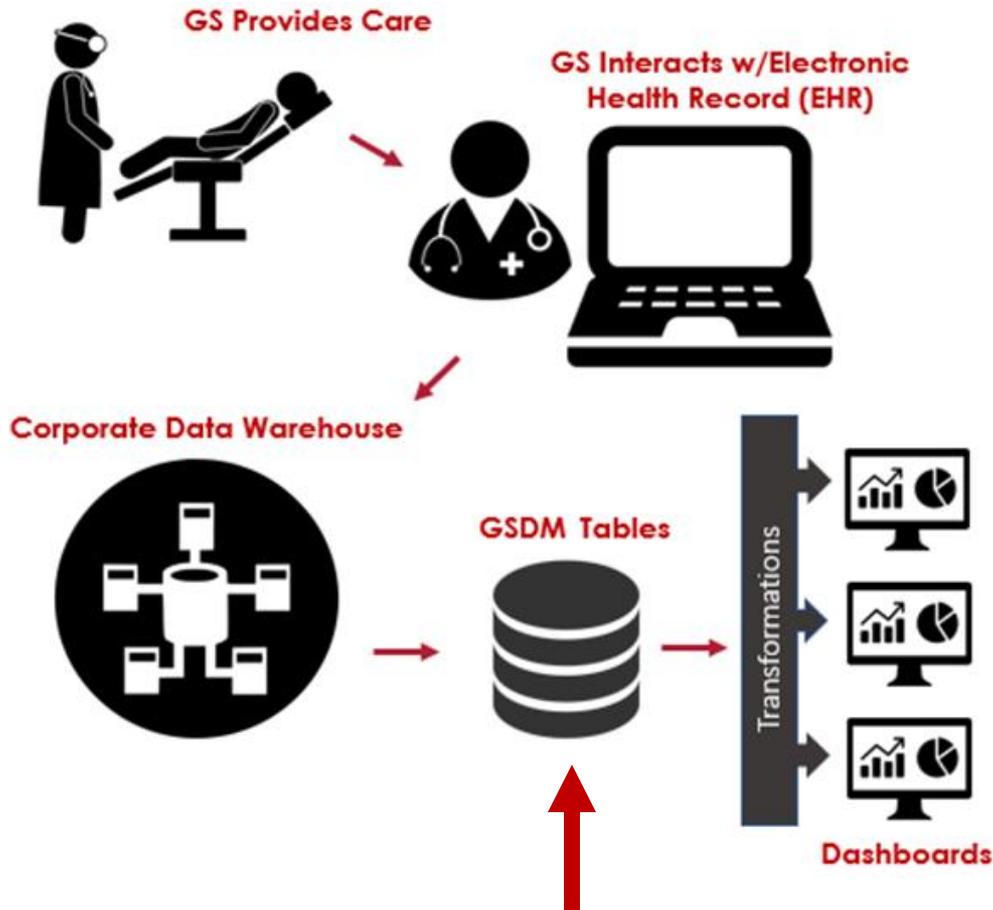


DATA ARCHITECTURE: ELT APPROACH



Load to Destination is Performed Prior to Any Transformations

DATA ARCHITECTURE: ELT APPROACH

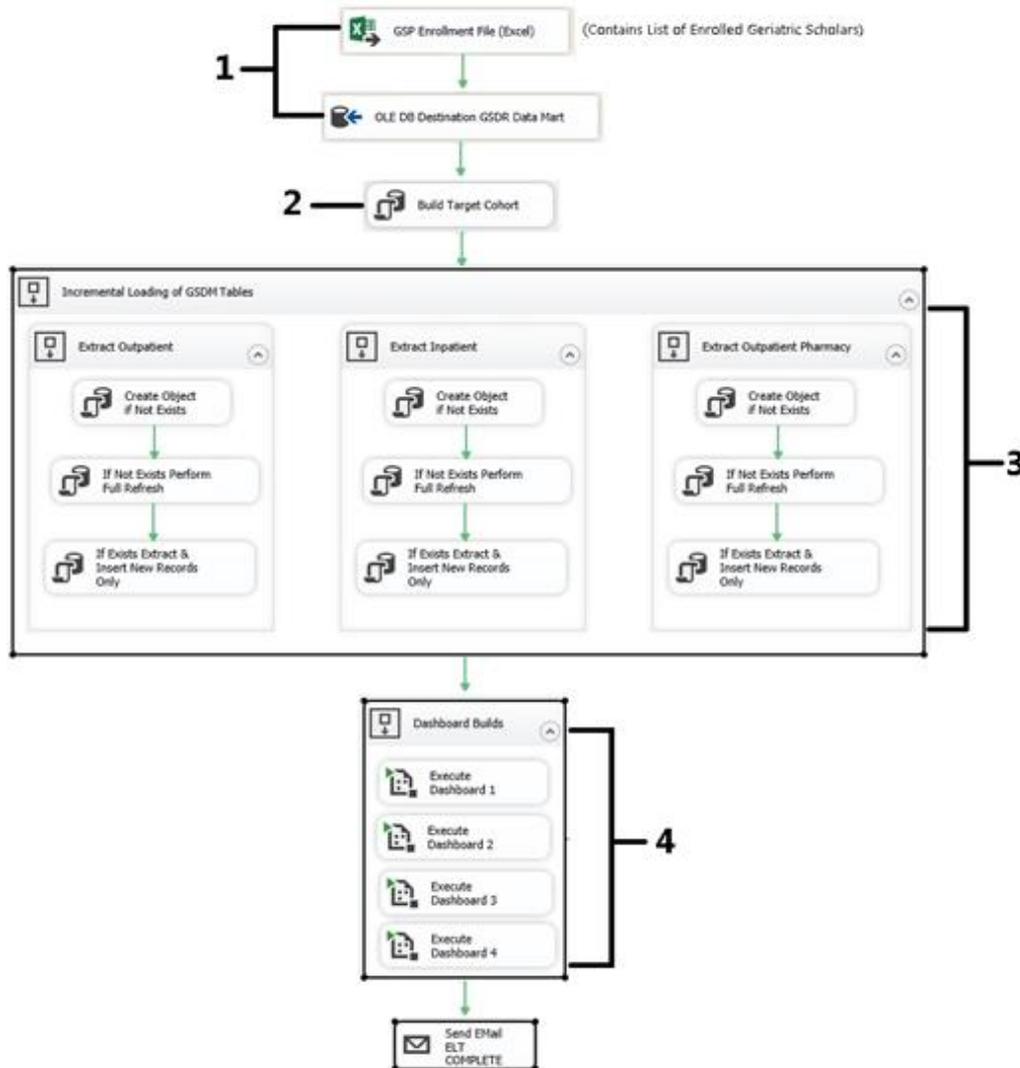


GSDM Benefits:

- Enforces Cohort Consistency
- Improved Query Performance

Load to Destination is Performed Prior to Any Transformations

SSIS PACKAGE WALKTHROUGH



- 1) The GSP Enrollment File is Passed to the Target Database
- 2) Target Cohort of Patients Identified
- 3) GSDM Tables Built Using Incremental Loads
- 4) Dashboards Built Using Stand-Alone Packages

DASHBOARD CHARACTERISTICS & COMPONENTS

LSV Permissions Model

VA Beers Report Provider Summary View

Report User: VHA19\WHASLCBumiZ
Data Last Uploaded: 5/17/2019

| | 2019 | |
|--|-------------------------------------|---|
| | Current Panel Size 65+ Years of Age | # of Panel, 65+ years of Inappropriate Medication Adults |
| | N | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 46,852 |
| | 42 | 24 <input type="checkbox"/> # of Panel by Therapeutic Class |
| Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary | | |
| | 151 | 74 <input type="checkbox"/> # of Panel by Therapeutic Class |
| Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary | | |
| | 26 | 10 <input type="checkbox"/> # of Panel by Therapeutic Class |
| Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary | | |



Additional Layer for End Users

VA Beers Report Provider Summary View

Report User: **Indiv**
Data Last Uploaded: 5/17/2019

| | 2019 AGS | | |
|--|-------------------------------------|---|--|
| | Current Panel Size 65+ Years of Age | # of Panel, 65+ years of age, of Inappropriate Medication (PI) Adults | |
| | N | N | |
| ALL GERIATRIC SCHOLARS | 108,299 | 46,852 | |
| XXXXXXXXXX, XXXXXXXX | 725 | 413 <input type="checkbox"/> # of Panel by Therapeutic Class | |
| Trends: Click here to view past prescribing history of PIMs Click here to view your QI tracking summary | | | |

VA HEALTH CARE Defining EXCELLENCE in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

By Default GS Only Have Access to Their Own Panels

CUSTOM PANEL REQUEST FORM (CPRF)

61% of Geriatric Scholars are PCPs

Remaining Scholars Can Request Access to a PCP's Panel



Geriatric Scholars

Custom Patient Panel Request Form



IMPORTANT: The primary care provider's patient panel for which you are requesting access must be at the same site (i.e., station/VISN) at which you currently are employed.

Request Date 5/9/2019 6:41:17 PM

Geriatric Scholar Name

Active Directory Account vha16\vha

Email @va.gov

Provide the information of provider you are interested in having added to your patient panel

Station/Site (629) New Orleans, LA

Primary Care Provider

Primary Care Provider Email

Submit

| Geriatric Scholar Custom Patient Panel Requests | | | | |
|---|---------------------|-------------|----------------|----------------|
| *New requests are processed nightly.* | | | | |
| Request ID | Request Date | PCP Station | PCP Staff Name | Request Status |
| 1 | 2019-03-20 23:39:42 | 629 | | Approved |
| 2 | 2019-03-20 23:40:29 | 629 | | Approved |
| 3 | 2019-03-20 23:41:28 | 629 | | Approved |
| 4 | 2019-03-20 23:42:14 | 629 | | Approved |
| 5 | 2019-03-20 23:49:29 | 629 | | Approved |

DASHBOARD CHARACTERISTICS & COMPONENTS



Beers Report
Provider Summary View

Report User:
Data Last Uploaded: 5/17/2019

[Individual Patient
Lookup](#)

[User Guide \(click here\)](#)
[Data Definitions Documentation \(click here\)](#)

| | Current Panel Size 65+ Years of Age | 2019 AGS General Beers Criteria | | | | 2019 AGS Beers Drug-Disease Interactions | | |
|------------------------|-------------------------------------|---|-------|--|------|---|--|--|
| | | # of Panel, 65+ years of age, on a Potentially Inappropriate Medication (PIM) for <u>Older Adults</u> | | # of Meds Issued in the Last 6m that Qualify as PIMs | | # of Panel, 65+ years of age <u>w/ Heart Failure</u> on a Potentially Inappropriate Medication (PIM) that may exacerbate this condition | # of Potentially Inappropriate Medications | |
| | | N | % | N | % | | | |
| ALL GERIATRIC SCHOLARS | 108,299 | 46,852 | 43.3 | 46,513 | 8.8 | 622 | 0.6 | |
| XXXXXXXXXX, XXXXXXXX | 725 | 413 <input type="checkbox"/> # of Panel by Therapeutic Class | 56.97 | 461 | 12.3 | 9 | 1.24 | |

Trends:
[Click here](#) to view past prescribing history of PIMs
[Click here](#) to view your QI tracking summary



VA HEALTH CARE | Defining **EXCELLENCE** in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

DASHBOARD CHARACTERISTICS & COMPONENTS



Report User:
Data Last Uploaded: 5/17/2019

[Individual Patient
Lookup](#)

[User Guide \(click here\)](#)

[Data Definitions Documentation \(click here\)](#)

| | Current Panel Size 65+ Years of Age | 2019 AGS General Beers Criteria | | | 2019 AGS Beers Drug-Disease Interactions | | | # of Potentially Inappropriate Medications |
|------------------------|-------------------------------------|--|-------|--|--|--|------|--|
| | | # of Panel, 65+ years of age, on a Potentially Inappropriate Medication (PIM) for Older Adults | | # of Meds Issued in the Last 6m that Qualify as PIMs | | # of Panel, 65+ years of age w/ Heart Failure on a Potentially Inappropriate Medication (PIM) that may exacerbate this condition | | |
| | N | N | % | N | % | N | % | |
| ALL GERIATRIC SCHOLARS | 108,299 | 46,852 | 43.3 | 46,513 | 8.8 | 622 | 0.6 | |
| XXXXXXXXXX, XXXXXXXX | 725 | 413 <input type="checkbox"/> # of Panel by Therapeutic Class | 56.97 | 461 | 12.3 | 9 | 1.24 | |

Trends:
[Click here](#) to view past prescribing history of PIMs
[Click here](#) to view your QI tracking summary



This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)



User Guide: Beers Medication Report

Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham

Support: Josea Kramer

Brian Sauer

Regina Richter

Chris Leng

Celena Peters

Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program

User Guide: Beers Medication Report

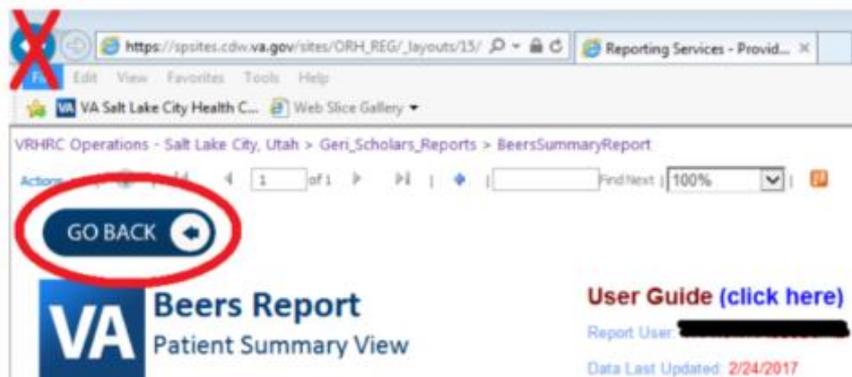
Step 3.) The report should open and the “Provider Summary View” should appear, similarly as shown here (provider name and summary frequencies have been masked in the image below):

| | Patient Panel Size 65+ Years of Age | | Average Active Rx Count | | # of Panel, 65+ years of age, on a Potentially Inappropriate Medication (PIM) for Older Adults | | # of Panel, 65+ years of age at least, Exposed to a Potentially Inappropriate Medication (PIM) that may exacerbate this condition | |
|------------------------|-------------------------------------|------|-------------------------|-------|--|------|---|--|
| | N | Mean | N | % | N | % | | |
| ALL GERIATRIC SCHOLARS | 107,678 | 7.6 | 42,820 | 39.77 | 344 | 0.02 | | |

(Details: Click here to view past prescribing history of PIMs.)

This view will provide the provider with aggregate-level data that shows how many people over the age of 65 are in their patient panel, their panel average active Rx count, as well as the number of patients in their panel on a potentially inappropriate medication (PIM) (includes definitive and conditional Beers medications). A summary row above the provider’s name is also viewable, which presents the same information for all the Geriatric Scholars combined.

Tip 1: When navigating through the different reporting views within the dashboard, avoid using your internet browser “back” button and instead utilize the “GO BACK” button found at the top of the reporting views as shown here:



Data Documentation: Beers Medication Report

February 1, 2017

Organizing Team

Author: Zach Burningham

Support: Josea Kramer

Brian Sauer

Regina Richter

Chris Leng

Celena Peters

Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program

All Data Refreshed Daily

The underlying data that supports the Beers Dashboard report is updated nightly. This is to ensure that report users are able to review near real-time data on their patient panels. A generalized framework has been utilized in support of the data extraction process in order to ensure the data are being processed in the most efficient way possible. This framework is followed by all members of the development team in order to improve reporting consistency and data reproducibility.

Patient Panels

Provider patient panels have been identified utilizing the Re-engineered Primary Care Management Module (RPCMM) system. In order for a patient to be considered an active member of a provider's panel, "relationshipenddate" must be null and the "currentproviderflag" must be set equal to "Y", which both indicate that an active relationship exists. In some cases, a new relationship between a provider and a patient will be identified in the RPCMM system and be reflected in this dashboard report prior the occurrence of a physical encounter between both parties. Thus, identifying a physical interaction between a provider and a patient is not a requirement when determine who are members of a certain provider's panel. Furthermore, non-veterans, deceased, test patients, and those currently not at least 65 years of age have been excluded from the patient panel populations identified in this dashboard reporting system.

Care Assessment Need (CAN) Scores

Veterans Health Administration (VHA) Care Assessment Need (CAN) scores can be found in the "Patient and Medication Detail View." These scores, which are calculated weekly, reflect a patient's likelihood of death and/or hospitalization in the next 90 days (90-Day CAN) and 1-year (1-Year CAN). The scores are expressed as a percentile, ranging from 0 (lowest risk) to 99 (highest risk). The algorithm that produces these scores are modeled using patient demographics, evidence of coexisting conditions, vital signs (blood pressure, heart rate, respiratory rate, body mass index), healthcare utilization (inpatient and outpatient), and number of fills for certain classes of medications such as: opioids anti-depressants, benzodiazepines, beta-blockers, and ACE inhibitors.

Conditions Relative to the Beers Criteria

The Beers Medication Report summarizes a patient's condition or disease state by examining all outpatient diagnoses that occurred in the last year (365 days prior to the date the data last uploaded). Patient conditions have been defined using International Classification of Diseases, Tenth Revision (ICD-10), codes. The conditions reported on and their corresponding ICD-10 codes are as follows:

Heart Failure

| ICD-10-Code | ICD-10 Description |
|-------------|---|
| I5020 | Unspecified systolic (congestive) heart failure |

DASHBOARD CHARACTERISTICS & COMPONENTS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report Provider Summary View

| | Current Panel Size 65+ Years of Age | # of Panel with a Hospitalization in the Last Year | % of Hospitalizations at Non-VA Medical Site | # of Panel Hos ACSC in t |
|------------------------|--|--|--|-----------------------------|
| | N | N | % | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 9,105 | 27.9 | 1,388 |
| | 42 | 3 | 66.7 | 1 |
| | 151 | 17 | 41.2 | 2 |
| | 26 | 6 | 50.0 | 0 |
| | 37 | 11 | 36.4 | 0 |
| | 382 | 17 | 70.6 | 2 |



DASHBOARD CHARACTERISTICS & COMPONENTS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report

Provider Summary View

| | Current Panel Size 65+ Years of Age | # of Panel with a Hospitalization in the Last Year | % of Hospitalizations at Non-VA Medical Site | # of Panel Hos ACSC in t |
|------------------------|--|--|--|-----------------------------|
| | N | N | % | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 9,105 | 27.9 | 1,388 |
| | 42 | 3 | 66.7 | 1 |
| | 151 | 17 | 41.2 | 2 |
| | 26 | 6 | 50.0 | 0 |
| | 37 | 11 | 36.4 | 0 |
| | 382 | 17 | 70.6 | 2 |

Aggregated Baseline Data



Choose VA

VA



U.S. Department
of Veterans Affairs

DASHBOARD CHARACTERISTICS & COMPONENTS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report

Provider Summary View

| | Current Panel Size 65+ Years of Age | # of Panel with a Hospitalization in the Last Year | % of Hospitalizations at Non-VA Medical Site | # of Panel Hos ACSC in t |
|------------------------|--|--|--|-----------------------------|
| | N | N | % | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 9,105 | 27.9 | 1,388 |
| | 42 | 3 | 66.7 | 1 |
| | 151 | 17 | 41.2 | 2 |
| | 26 | 6 | 50.0 | 0 |
| | 37 | 11 | 36.4 | 0 |
| | 382 | 17 | 70.6 | 2 |

Aggregated Baseline Data



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Data Definitions

Go Back to
Provider Summary

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Qua

Click [here](#) for the Office of Rural Health OS

Patient Summary View for Geriatric Scholar: Scholar, Geriatric (Test)

Total # of Unique Patients in this view: 35

| | | |
|---|--|--|
| Patient, Test (0000) SSN(4) : 0000 Age : 82.9 Gender : M Weight (Kg) : 184.70 Calculated Osteoporosis Self-Assessment Tool (OST) Score : 0.22 Next Primary Care Appt 01/01/1900 | <p><u>Osteoporosis Screening</u> Status (Click on screening methods to drill down)</p> <p style="text-align: center; font-size: 2em; color: red;">!</p> <p><u>Screening Method</u></p> <p>DEXA Scan</p> <p>Active Osteoporosis Rx</p> <p>Manual Screening Entry</p> <p style="color: blue;">**Click Here to Enter Screening**</p> | <p><u>ACOVE Osteoporosis Risk Factors</u> (Click on risk factors to drill down)</p> <p>Female (Age 65+)</p> <p><input checked="" type="checkbox"/> Male, Hx of Chronic Oral Glucocorticoids (Age 65+)</p> <p>Male w/ Primary Hyperparathyroidism (Age 65+)</p> <p>Male, Hx of GnRH medication Use (Age 65+)</p> <p>Male w/ Hypogonadism (Age 65+)</p> <p>Hx of Kyphoplasty/Vertebroplasty (Age 65+)</p> <p>Hx of Hip Fracture (Age 65+)</p> |
|---|--|--|

DASHBOARD CHARACTERISTICS & COMPONENTS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report

Provider Summary View

| | Current Panel Size 65+ Years of Age | # of Panel with a Hospitalization in the Last Year | % of Hospitalizations at Non-VA Medical Site | # of Panel Hos ACSC in t |
|------------------------|--|--|--|-----------------------------|
| | N | N | % | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 9,105 | 27.9 | 1,388 |
| | 42 | 3 | 66.7 | 1 |
| | 151 | 17 | 41.2 | 2 |
| | 26 | 6 | 50.0 | 0 |
| | 37 | 11 | 36.4 | 0 |
| | 382 | 17 | 70.6 | 2 |

Aggregated Baseline Data



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Data Definitions

Go Back to
Provider Summary

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Qua

Click [here](#) for the Office of Rural Health OS

Patient Summary View for Geriatric Scholar: Scholar, Geriatric (Test)

Total # of Unique Patients in this view: 35

| | | |
|--|--|---|
| <p>Patient, Test (0000)</p> <p>SSN(4) : 0000</p> <p>Age : 82.9</p> <p>Gender : M</p> <p>Weight (Kg) : 184.70</p> <p>Calculated Osteoporosis Self-Assessment Tool (OST) Score : 0.22</p> <p>Next Primary Care Appt</p> <p>01/01/1900</p> | <p><u>Osteoporosis Screening</u></p> <p><u>Status</u></p> <p>(Click on screening methods to drill down)</p> <p style="text-align: center;">!</p> <p><u>Screening Method</u></p> <p>DEXA Scan</p> <p>Active Osteoporosis Rx</p> <p>Manual Screening Entry</p> <p>**Click Here to Enter Screening**</p> | <p><u>ACOVE Osteoporosis Risk Factors</u></p> <p>(Click on risk factors to drill down)</p> <p>Female (Age 65+)</p> <p><input checked="" type="checkbox"/> Male, Hx of Chronic Oral Glucocorticoids (Age 65+)</p> <p>Male w/ Primary Hyperparathyroidism (Age 65+)</p> <p>Male, Hx of GnRH medication Use (Age 65+)</p> <p>Male w/ Hypogonadism (Age 65+)</p> <p>Hx of Kyphoplasty/Vertebroplasty (Age 65+)</p> <p>Hx of Hip Fracture (Age 65+)</p> |
|--|--|---|

“Put the Patients in Front of Me”

DASHBOARD CHARACTERISTICS & COMPONENTS



Ambulatory Care Sensitive Condition (ACSC) Hospitalization Report

Provider Summary View

| | Current Panel Size 65+ Years of Age | # of Panel with a Hospitalization in the Last Year | % of Hospitalizations at Non-VA Medical Site | # of Panel Hos ACSC in t |
|------------------------|--|--|--|-----------------------------|
| | N | N | % | N |
| ALL GERIATRIC SCHOLARS | 108,299 | 9,105 | 27.9 | 1,388 |
| | 42 | 3 | 66.7 | 1 |
| | 151 | 17 | 41.2 | 2 |
| | 26 | 6 | 50.0 | 0 |
| | 37 | 11 | 36.4 | 0 |
| | 382 | 17 | 70.6 | 2 |

Aggregated Baseline Data



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Data Definitions

Go Back to
Provider Summary

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Qua

Click [here](#) for the Office of Rural Health OS

Patient Summary View for Geriatric Scholar: Scholar, Geriatric (Test)

Total # of Unique Patients in this view: 35

| | | |
|---|--|---|
| <p>Patient, Test (0000)</p> <p>SSN(4) : 0000</p> <p>Age : 82.9</p> <p>Gender : M</p> <p>Weight (Kg) : 184.70</p> <p>Calculated Osteoporosis Self-Assessment Tool (OST) Score : 0.22</p> <p>Next Primary Care Appt 01/01/1900</p> | <p><u>Osteoporosis Screening</u> Status (Click on screening methods to drill down)</p> <p style="text-align: center; font-size: 2em; color: red;">!</p> <p>See More ✓</p> <p><u>Screening Method</u></p> <p>DEXA Scan</p> <p>Active Osteoporosis Rx</p> <p>Manual Screening Entry</p> <p>**Click Here to Enter Screening**</p> | <p><u>ACOVE Osteoporosis Risk Factors</u> (Click on risk factors to drill down)</p> <p>Female (Age 65+)</p> <p>Male, Hx of Chronic Oral Glucocorticoids (Age 65+)</p> <p>Male w/ Primary Hyperparathyroidism (Age 65+)</p> <p>Male, Hx of GnRH medication Use (Age 65+)</p> <p>Male w/ Hypogonadism (Age 65+)</p> <p>Hx of Kyphoplasty/Vertebroplasty (Age 65+)</p> <p>Hx of Hip Fracture (Age 65+)</p> |
|---|--|---|

“Put the Patients in
Front of Me”

DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXXX

Trends:

[Click here](#) to view past prescribing history of PIMs

[Click here](#) to view your QI tracking summary

DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXXX

Trends:

[Click here](#) to view past prescribing history of PIMs

[Click here](#) to view your QI tracking summary

DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXX

Trends:

[Click here](#) to view past prescribing history of PIMs

[Click here](#) to view your QI tracking summary

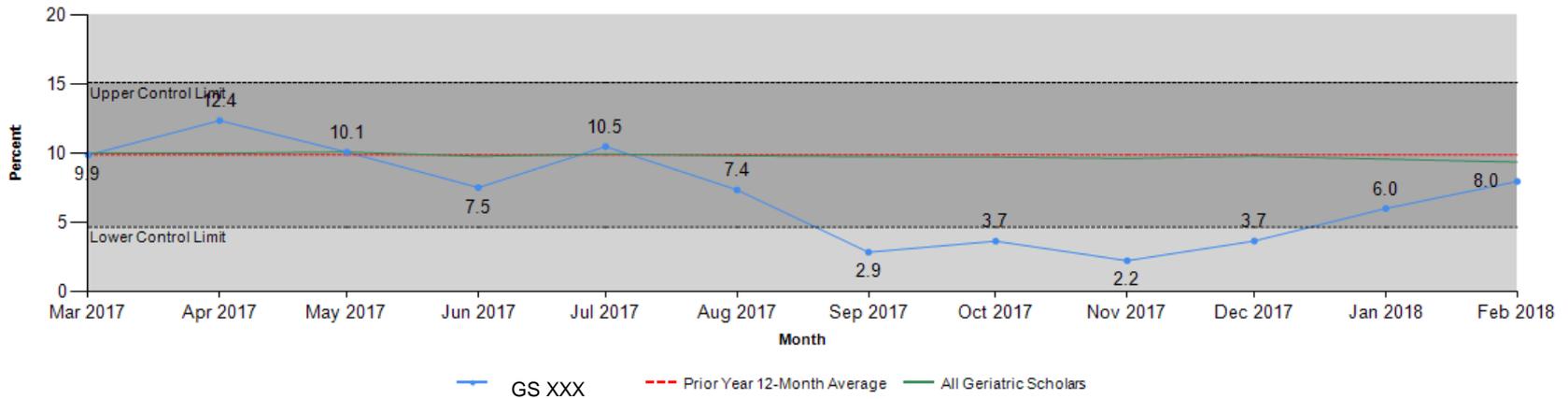
GO BACK



All Beers Medications

*Trends do not include Drug-Disease Interaction Beers Medications

Monthly Percent of Medications Issued that are Potentially Inappropriate



DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXXX

Trends:

[Click here to view past prescribing history of PIMs](#)

[Click here to view your QI tracking summary](#)

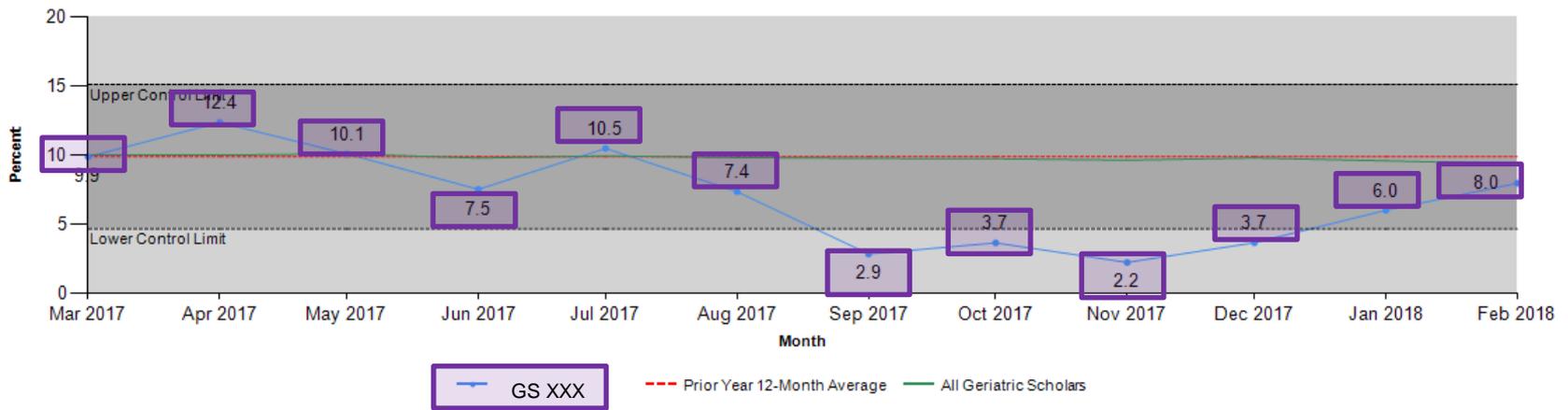
GO BACK



All Beers Medications

*Trends do not include Drug-Disease Interaction Beers Medications

Monthly Percent of Medications Issued that are Potentially Inappropriate



Choose VA

VA



U.S. Department of Veterans Affairs

DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXX

Trends:

[Click here to view past prescribing history of PIMs](#)

[Click here to view your QI tracking summary](#)

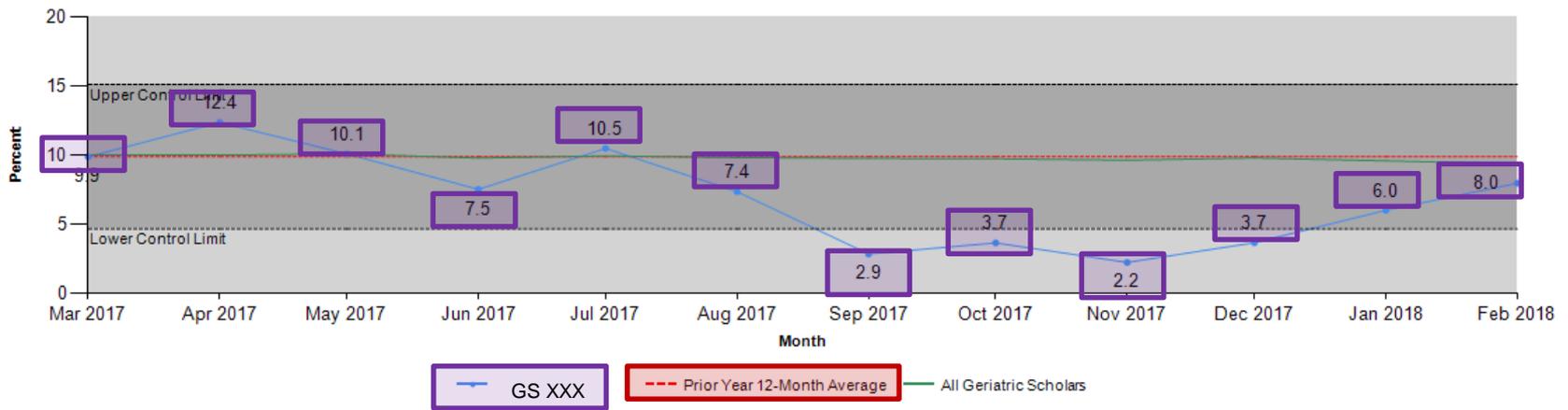
GO BACK



All Beers Medications

*Trends do not include Drug-Disease Interaction Beers Medications

Monthly Percent of Medications Issued that are Potentially Inappropriate



Choose VA

VA



U.S. Department of Veterans Affairs

DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXXX

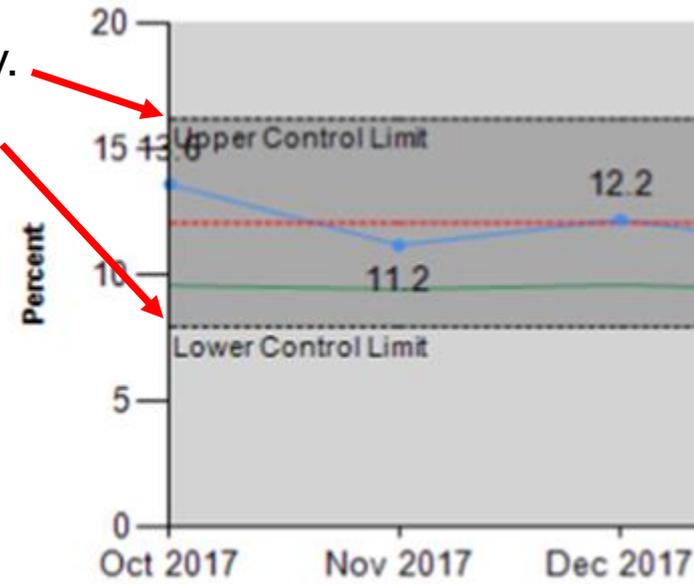
Trends:

[Click here to view past prescribing history of PIMs](#)

[Click here to view your QI tracking summary](#)

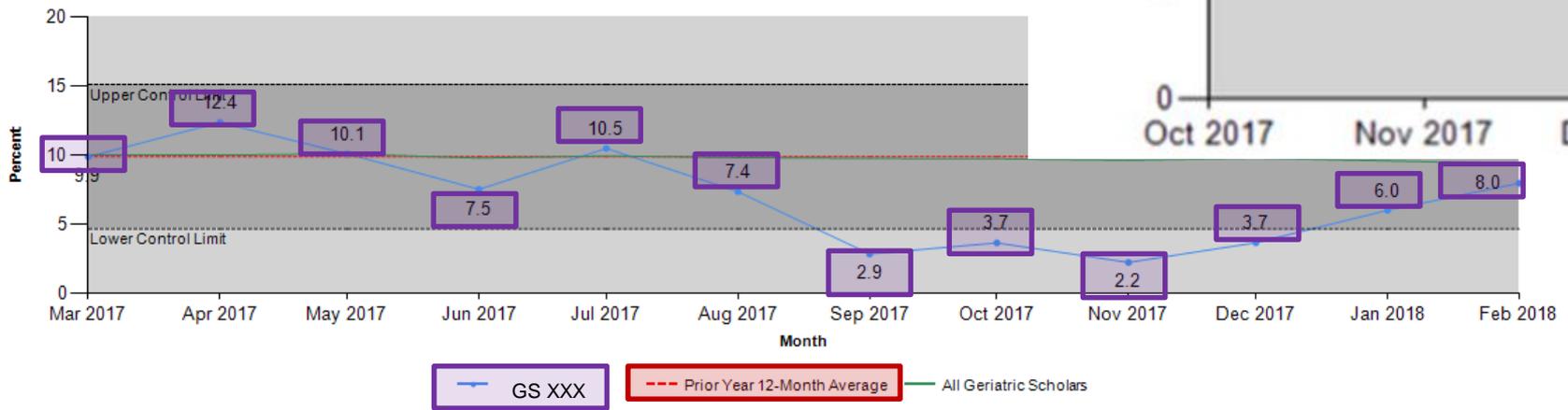
GO BACK 

UCL (+) 3 Std. Dev.
LCL (-) 3 Std. Dev.



All Beers Medications

Monthly Percent of Medications Issued that are Potentially Inapp:



DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

XXXXXXXXXX, XXXXXXXX

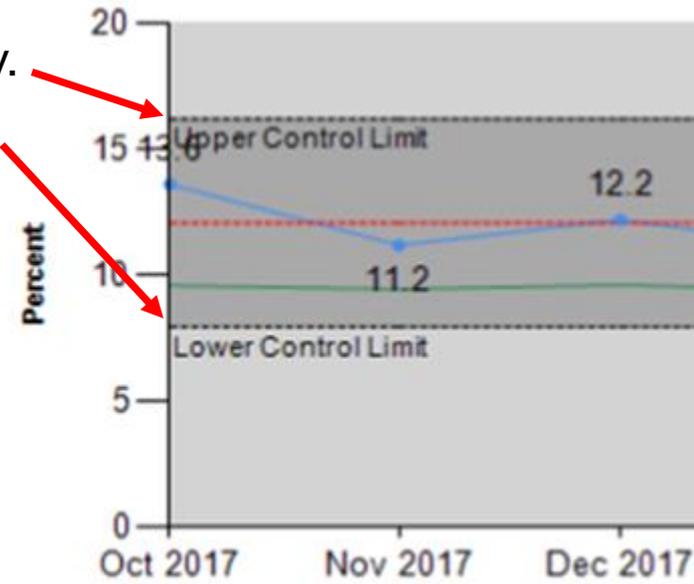
Trends:

[Click here to view past prescribing history of PIMs](#)

[Click here to view your QI tracking summary](#)

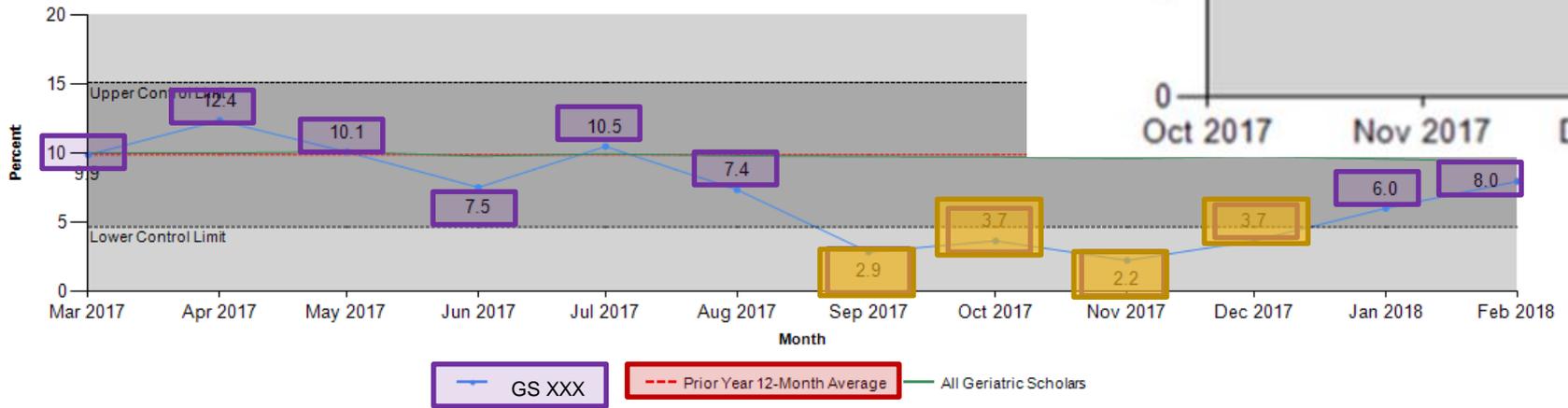
GO BACK 

UCL (+) 3 Std. Dev.
LCL (-) 3 Std. Dev.



All Beers Medications

Monthly Percent of Medications Issued that are Potentially Inapp:



DASHBOARD CHARACTERISTICS & COMPONENTS

ALL GERIATRIC SCHOLARS

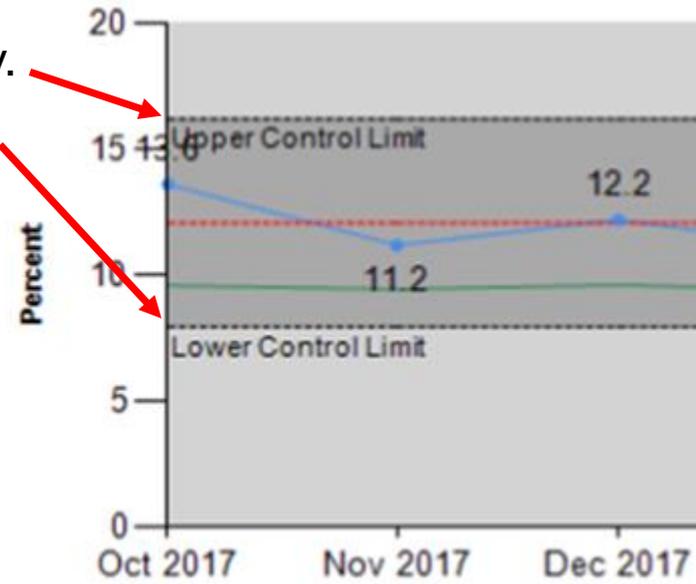
XXXXXXXXXX, XXXXXXXX

Trends:

[Click here to view past prescribing history of PIMs](#)

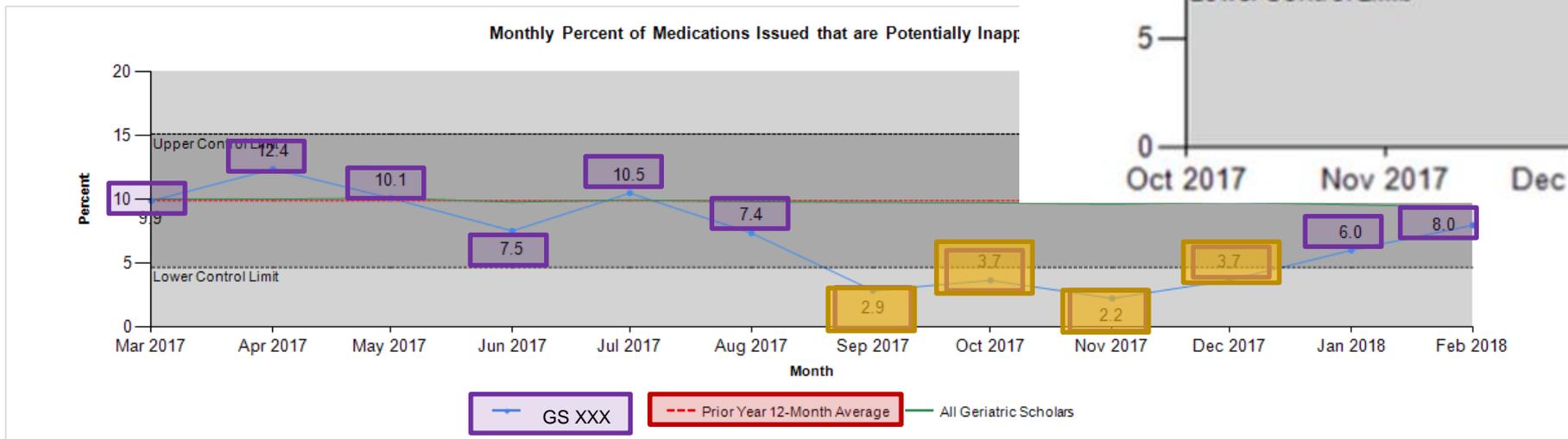
[Click here to view your QI tracking summary](#)

UCL (+) 3 Std. Dev.
LCL (-) 3 Std. Dev.



GO BACK

All Beers Medications



Often Used for Final Poster Deliverable

OTHER UNIQUE FEATURES: CDS

VA Beers Report Patient and Medication Detail View

[User Guide \(click here\)](#)

Report User: VHA19\VHASLCBurniZ

Data Last Updated: 5/20/2019

[Data Definitions Documentation \(click here\)](#)

AGS 2019 Updated Beers Criteria

[Click here to link to the publication](#)

Beers Alternative Therapies

[Click here to link to the publication](#)

Patient Name: [REDACTED]

| Last 4 of SSN | Date of Last Encounter w/ Geri-Scholar | Upcoming Primary Care Appointment Date | Age | Gender | Race | 90-Day CAN Score | 1-Year CAN Score |
|---------------|--|--|-----|--------|-------|------------------|------------------|
| [REDACTED] | [REDACTED] | [REDACTED] | 70 | M | WHITE | 60 | 65 |

Patient Problem List

*Only reports on select conditions referenced in the 2019 Beers Criteria Recommendations

| |
|--------------|
| Diabetes |
| Hypertension |
| Anxiety |

Most Recent Pain Score

| Date Reported | Result |
|---------------|--------|
| [REDACTED] | 6 |

List of Active Beers PIMs for Older Adults

| Drug Name w/ Dose | Issue Date | Drug Class | Prescriber is Geriatric Scholar | Non-VA Medication | Recommendation | Evidence Quality | Suggested Alternative Therapy |
|----------------------------|------------|----------------------------|---------------------------------|-------------------|---|---|--|
| AMITRIPTYLINE HCL 50MG TAB | [REDACTED] | TRICYCLIC ANTIDEPRESSANTS | ● | — | Avoid | High: Consistent results; well-designed studies | For depression -- SSRI (except paroxetine), SNRI, bupropion |
| OMEPRAZOLE 40MG CAP,EC | [REDACTED] | GASTRIC MEDICATIONS, OTHER | ● | — | Avoid for scheduled use for >8 weeks unless for high-risk patients, erosive esophagitis, Barretts esophagitis, or demonstrated need for maintenance treatment | High: Consistent results; well-designed studies | No suggested alternative therapy at this time; monitor judiciously |

OTHER UNIQUE FEATURES: CDS

VA Beers Report
Patient and Medication Detail View

User Guide ([click here](#))
Report User: VHA19\VHASL\CBurniZ
Data Last Updated: 5/20/2019

Data Definitions Documentation ([click here](#))
AGS 2019 Updated Beers Criteria
[Click here to link to the publication](#)

Beers Alternative Therapies
[Click here to link to the publication](#)

Patient Name: [REDACTED]

| Last 4 of SSN | Date of Last Encounter w/ Geri-Scholar | Upcoming Primary Care Appointment Date | Age | Gender | Race | 90-Day CAN Score | 1-Year CAN Score |
|---------------|--|--|-----|--------|-------|------------------|------------------|
| [REDACTED] | [REDACTED] | [REDACTED] | 70 | M | WHITE | 60 | 65 |

Patient Problem List

*Only reports on select conditions referenced in the 2019 Beers Criteria Recommendations

| |
|--------------|
| Diabetes |
| Hypertension |
| Anxiety |

Most Recent Pain Score

| Date Reported | Result |
|---------------|--------|
| [REDACTED] | 6 |

List of Active Beers PIMs for Older Adults

| Drug Name w/ Dose | Drug Class | Prescriber is Geriatric Scholar | Non-VA Medication | Recommendation | Evidence Quality | Suggested Alternative Therapy |
|----------------------------|---------------------------|---------------------------------|-------------------|---|---|--|
| AMITRIPTYLINE HCL 50MG TAB | TRICYCLIC ANTIDEPRESSANTS | ✔ | — | Avoid | High: Consistent results; well-designed studies | For depression -- SSRI (except paroxetine), SNRI, bupropion |
| OMEPRAZOLE 40MG CAP,EC | GASTRIC MEDICATIONS,OTHER | ✔ | — | Avoid for scheduled use for >8 weeks unless for high-risk patients, erosive esophagitis, Barretts esophagitis, or demonstrated need for maintenance treatment | High: Consistent results; well-designed studies | No suggested alternative therapy at this time; monitor judiciously |

OTHER UNIQUE FEATURES: CDS

VA Beers Report Patient and Medication Detail View

[User Guide \(click here\)](#)

Report User: VHA19\VHASLCLBumiz

Data Last Updated: 5/20/2019

[Data Definitions Documentation \(click here\)](#)

AGS 2019 Updated Beers Criteria

[Click here to link to the publication](#)

Beers Alternative Therapies

[Click here to link to the publication](#)

Patient Name: [REDACTED]

| Last 4 of SSN | Date of Last Encounter w/ Geri-Scholar | Upcoming Primary Care Appointment Date | Age | Gender | Race | 90-Day CAN Score | 1-Year CAN Score |
|---------------|--|--|-----|--------|-------|------------------|------------------|
| [REDACTED] | [REDACTED] | [REDACTED] | 70 | M | WHITE | 60 | 65 |

Patient Problem List

*Only reports on select conditions referenced in the 2019 Beers Criteria Recommendations

| |
|--------------|
| Diabetes |
| Hypertension |
| Anxiety |

Most Recent Pain Score

| Date Reported | Result |
|---------------|--------|
| [REDACTED] | 6 |

List of Active Beers PIMs for Older Adults

| Drug Name w/ Dose | Drug Class | Prescriber is Geriatric Scholar | Non-VA Medication | Recommendation | Evidence Quality |
|----------------------------|---------------------------|---------------------------------|-------------------|---|---|
| AMITRIPTYLINE HCL 50MG TAB | TRICYCLIC ANTIDEPRESSANTS | ✔ | — | Avoid | High: Consistent results; well-designed studies |
| OMEPRAZOLE 40MG CAP,EC | GASTRIC MEDICATIONS,OTHER | ✔ | — | Avoid for scheduled use for >8 weeks unless for high-risk patients, erosive esophagitis, Barretts esophagitis, or demonstrated need for maintenance treatment | High: Consistent results; well-designed studies |

| Suggested Alternative Therapy |
|--|
| For depression -- SSRI (except paroxetine), SNRI, bupropion |
| No suggested alternative therapy at this time; monitor judiciously |

OTHER UNIQUE FEATURES: CDS

VA Beers Report
Patient and Medication Detail View

[User Guide \(click here\)](#)
Report User: VHA19\VHASLCBumiZ
Data Last Updated: 5/20/2019

[Data Definitions Documentation \(click here\)](#)
AGS 2019 Updated Beers Criteria
[Click here to link to the publication](#)

[Beers Alternative Therapies](#)
[Click here to link to the publication](#)

Patient Name: [REDACTED]

| Last 4 of SSN | Date of Last Encounter w/ Geri-Scholar | Upcoming Primary Care Appointment Date | Age | Gender | Race | 90-Day CAN Score | 1-Year CAN Score |
|---------------|--|--|-----|--------|-------|------------------|------------------|
| [REDACTED] | [REDACTED] | [REDACTED] | 70 | M | WHITE | 60 | 65 |

Patient Problem List

*Only reports on select conditions referenced in the 2019 Beers Criteria Recommendations

| |
|--------------|
| Diabetes |
| Hypertension |
| Anxiety |

Most Recent Pain Score

| Date Reported | Result |
|---------------|--------|
| [REDACTED] | 6 |

List of Active Beers PIMs for Older Adults

| Drug Name w/ Dose | Drug Class | Prescriber is Geriatric Scholar | Non-VA Medication | Recommendation | Evidence Quality |
|----------------------------|---------------------------|---------------------------------|-------------------|---|---|
| AMITRIPTYLINE HCL 50MG TAB | TRICYCLIC ANTIDEPRESSANTS | ✔ | — | Avoid | High: Consistent results; well-designed studies |
| OMEPRAZOLE 40MG CAP,EC | GASTRIC MEDICATIONS,OTHER | ✔ | — | Avoid for scheduled use for >8 weeks unless for high-risk patients, erosive esophagitis, Barretts esophagitis, or demonstrated need for maintenance treatment | High: Consistent results; well-designed studies |

Suggested Alternative Therapy

| |
|--|
| For depression -- SSRI (except paroxetine), SNRI, bupropion |
| No suggested alternative therapy at this time; monitor judiciously |

OTHER UNIQUE FEATURES: CDS

DRUGS & PHARMACOLOGY

VA Beers Report Patient and Medication

| Patient Name: | |
|---------------|------------------------------|
| Last 4 of SSN | Date of Last Enc w/ Geri-Sch |
| | |

Patient Problem List

*Only reports on select conditions referenced in Recommendations

| |
|--------------|
| Diabetes |
| Hypertension |
| Anxiety |

List of Active Beers

| Drug Name w/ Dose |
|----------------------------|
| AMITRIPTYLINE HCL 50MG TAB |
| OMEPRAZOLE 40MG CAP,EC |

Alternative Medications for Medications in the Use of High-Risk Medications in the Elderly and Potentially Harmful Drug–Disease Interactions in the Elderly Quality Measures

Joseph T. Hanlon, PharmD, MS,^{a,b,c,d,e,f,g,h} Todd P. Semla, MS, PharmD,^{i,j,k} and Kenneth E. Schmader, MD^{l,m}

The National Committee for Quality Assurance (NCQA) and the Pharmacy Quality Alliance (PQA) use the American Geriatrics Society (AGS) Beers Criteria to designate the quality measure Use of High-Risk Medications in the Elderly (HRM). The Centers for Medicare and Medicaid Services (CMS) use the HRM measure to monitor and evaluate the quality of care provided to Medicare beneficiaries. NCQA additionally uses the AGS Beers Criteria to designate the quality measure Potentially Harmful Drug–Disease Interactions in the Elderly. Medications included in these measures may be harmful to elderly adults and negatively affect a healthcare plan’s quality ratings. Prescribers, pharmacists, patients, and healthcare plans may benefit from evidence-based alternative medication treatments to avoid these problems. Therefore the goal of this work was to develop a list of alternative medications to those included in the two measures. The authors conducted a comprehensive literature review from 2000 to 2015 and a search of their personal files. From the evidence, they prepared a list of drug-therapy alternatives with supporting references. A reference list of nonpharmacological approaches was also provided when appropriate. NCQA, PQA, the 2015 AGS Beers Criteria panel, and the

Executive Committee of the AGS reviewed the drug therapy alternatives and nonpharmacological approaches. Recommendations by these groups were incorporated into the final list of alternatives. The final product of drug-therapy alternatives to medications included in the two quality measures and some nonpharmacological resources will be useful to health professionals, consumers, payers, and health systems that care for older adults. *J Am Geriatr Soc* 63:e8–e18, 2015.

Key words: inappropriate medications; Beers Criteria; medication management

The pharmacopeia of treatment options available to clinicians is vast, and its navigation complicated. A number of factors must be considered when selecting medications for elderly adults, including each individual’s parameters that may affect drug pharmacokinetics/pharmacodynamics, formulary choices and related costs, ease of

Suggested Alternative Therapy

For depression -- SSRI (except paroxetine), SNRI, bupropion

No suggested alternative therapy at this time; monitor judiciously

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Data Definitions

[Go Back to Provider Summary](#)

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality

Click [here](#) for the Office of Rural Health OST P

Patient Summary View for Geriatric Scholar: Scholar, Geriatric (Test)

Total # of Unique Patients in this view: 35

| Patient, Test (0000) | Osteoporosis Screening Status | ACOVE Osteoporosis Risk Factors |
|---|---|---|
| SSN(4) : 0000 | (Click on screening methods to drill down) | (Click on risk factors to drill down) |
| Age : 82.9 |  | Female (Age 65+) |
| Gender : M | See More ✓ | Male, Hx of Chronic Oral Glucocorticoids (Age 65+) |
| Weight (Kg) : 184.70 | <u>Screening Method</u> | Male w/ Primary Hyperparathyroidism (Age 65+) |
| Calculated Osteoporosis Self-Assessment Tool (OST) Score : 0.22 | DEXA Scan | Male, Hx of GnRH medication Use (Age 65+) |
| Next Primary Care Appt | Active Osteoporosis Rx | Male w/ Hypogonadism (Age 65+) |
| 01/01/1900 | Manual Screening Entry | Hx of Kyphoplasty/Vertebroplasty (Age 65+) |
| | **Click Here to Enter Screening** | Hx of Hip Fracture (Age 65+) |

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Data Definitions

[Go Back to
Provider Summary](#)

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality

Click [here](#) for the Office of Rural Health OST P

Patient Summary View for Geriatric Scholar: Scholar, Geriatric (Test)

Total # of Unique Patients in this view: 35

| Patient, Test (0000) | Osteoporosis Screening Status | ACOVE Osteoporosis Risk Factors |
|---|--|---|
| SSN(4) : 0000 | (Click on screening methods to drill down) | (Click on risk factors to drill down) |
| Age : 82.9 | | Female (Age 65+) |
| Gender : M | See More ✓ | Male, Hx of Chronic Oral Glucocorticoids (Age 65+) |
| Weight (Kg) : 184.70 | <u>Screening Method</u> | Male w/ Primary Hyperparathyroidism (Age 65+) |
| Calculated Osteoporosis Self-Assessment Tool (OST) Score : 0.22 | DEXA Scan | Male, Hx of GnRH medication Use (Age 65+) |
| Next Primary Care Appt | Active Osteoporosis Rx | Male w/ Hypogonadism (Age 65+) |
| 01/01/1900 | Manual Screening Entry | Hx of Kyphoplasty/Vertebroplasty (Age 65+) |
| | **Click Here to Enter Screening** | Hx of Hip Fracture (Age 65+) |

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Patient Summary View

User Guide

Go Back to

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality
Click [here](#) for the Office of Rural Health OST P

Patient Summary View for Geriatric Scholar:
Total # of Unique Patients in this view: 35

Patient, Test (0000)

SSN(4) : 0000
Age : 82.9
Gender : M
Weight (Kg) : 184.70
Calculated Osteoporosis
Self-Assessment Tool 0.22
(OST) Score :
[Next Primary Care Appt](#)
01/01/1900

Screening Completed?

Yes

Screening Date

5/20/2019



NULL

Please Select Screening Approach then click APPLY below...

Bone Mineral Density

ACOVE Osteoporosis Risk Factors

(Click on risk factors to drill down)

+))

ronic Oral Glucocorticoids (Age 65+)

/ Hyperparathyroidism (Age 65+)

TH medication Use (Age 65+)

onadism (Age 65+)

sty/Vertebroplasty (Age 65+)

ure (Age 65+)



Choose VA

VA



U.S. Department
of Veterans Affairs

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Screening Correction View

User Guide

Data Definitions

[Go Back to Patient Summary](#)

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality

Click [here](#) for the Office of Rural Health OSTP

Pa
To

| | |
|---|--|
| Patient Name: Patient, Test (0000) | |
| Screening Completed? Yes | Screening Date: 5/20/2019 12:00:00 AM |
| Screening Approach: BMD | |



Does this look correct?
If so, click below to upload. is



[Upload Correction!](#)

SS
Ag
Ge
W
Ca
Se
(O



VA HEALTH CARE Defining **EXCELLENCE** in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Screening Correction View

User Guide

Data Definitions

[Go Back to Patient Summary](#)

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality

Click [here](#) for the Office of Rural Health OSTP

Pa
To

| | |
|---|--|
| Patient Name: Patient, Test (0000) | |
| Screening Completed? Yes | Screening Date: 5/20/2019 12:00:00 AM |
| Screening Approach: BMD | |

Does this look correct?
If so, click below to upload.

[Upload Correction!](#)



VA
HEALTH CARE
Defining **EXCELLENCE**
in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Screening Correction View

User Guide

Data Definitions

[Go Back to Patient Summary](#)

Additional Resources

Click [here](#) for the ACOVE Osteoporosis Quality

Click [here](#) for the Office of Rural Health OSTP

Pa
To

| | |
|---|--|
| Patient Name: Patient, Test (0000) | |
| Screening Completed? Yes | Screening Date: 5/20/2019 12:00:00 AM |
| Screening Approach: BMD | |



Does this look correct?
If so, click below to upload.

Screening Correction successfully uploaded!
[Click Here](#) to return to Patient Summary View



VA HEALTH CARE
Defining **EXCELLENCE**
in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

OTHER UNIQUE FEATURES: WRITEBACK



Osteoporosis Risk Assessment Report

Screening Correction View

[User Guide](#) [Data Definitions](#) [Go Back to Patient Summary](#)

Additional Resources
Click [here](#) for the ACOVE Osteoporosis Quality
Click [here](#) for the Office of Rural Health OST P

Pa To **Patient Name: Patient, Test (0000)**

Screening Completed? **Yes**

Screening Ap

Osteoporosis Screening Status
(Click on screening methods to drill down)

Does this look correct?
If so, click below to upload.

**on successfully uploaded!
to Patient Summary View**

Screening Method

DEXA Scan

Active Osteoporosis Rx

See More ✓ **Manual Screening Entry**

VA HEALTH CARE Defining EXCELLENCE in the 21st Century Thi Sch Hei

Problems? Feedback is Welcome! [Click here to conta...](#)

****Click Here to Enter Screening****

OTHER UNIQUE FEATURES: UNSTRUCTURED DATA



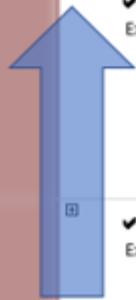
Fall Risk Assessment Report

Patient Summary View : w/ Fall in the Last Year

Report User: VHA19\VHASLCCBurniZ

Data Last Refreshed: 8/7/2018 12:00:00 AM

Provider:



| Evidence of Recent Fall | Actively on High Risk Medication? | Upcoming Appointment |
|--|--|----------------------|
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note <input checked="" type="checkbox"/> ICD-10 Date: Description: Fall on same level from slipping, tripping and stumbling without subsequent striking against object, subsequent encounter | <p style="text-align: center;">Yes</p> <p> <input checked="" type="checkbox"/> Antimuscarinic/Antipasmodics <input checked="" type="checkbox"/> Sedative Hypnotics <input checked="" type="checkbox"/> Herb Alternatives <input checked="" type="checkbox"/> Antidepressants <input checked="" type="checkbox"/> Anticonvulsants <input checked="" type="checkbox"/> CNS Medications <input checked="" type="checkbox"/> Appetite Suppressants <input checked="" type="checkbox"/> Antipsychotics </p> | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note <input checked="" type="checkbox"/> ICD-10 Date: Description: | <p style="text-align: center;">No</p> <p> <input checked="" type="checkbox"/> Antimuscarinic/Antipasmodics <input checked="" type="checkbox"/> Sedative Hypnotics <input checked="" type="checkbox"/> Herb Alternatives <input checked="" type="checkbox"/> Antidepressants <input checked="" type="checkbox"/> Anticonvulsants <input checked="" type="checkbox"/> CNS Medications <input checked="" type="checkbox"/> Appetite Suppressants <input checked="" type="checkbox"/> Antipsychotics </p> | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note <input checked="" type="checkbox"/> ICD-10 Date: Description: | <p style="text-align: center;">Yes</p> <p> <input checked="" type="checkbox"/> Antimuscarinic/Antipasmodics <input checked="" type="checkbox"/> Sedative Hypnotics <input checked="" type="checkbox"/> Herb Alternatives <input checked="" type="checkbox"/> Antidepressants <input checked="" type="checkbox"/> Anticonvulsants <input checked="" type="checkbox"/> CNS Medications <input checked="" type="checkbox"/> Appetite Suppressants <input checked="" type="checkbox"/> Antipsychotics </p> | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note <input checked="" type="checkbox"/> ICD-10 Date: Description: | <p style="text-align: center;">Yes</p> <p> <input checked="" type="checkbox"/> Antimuscarinic/Antipasmodics <input checked="" type="checkbox"/> Sedative Hypnotics <input checked="" type="checkbox"/> Herb Alternatives <input checked="" type="checkbox"/> Antidepressants <input checked="" type="checkbox"/> Anticonvulsants <input checked="" type="checkbox"/> CNS Medications <input checked="" type="checkbox"/> Appetite Suppressants <input checked="" type="checkbox"/> Antipsychotics </p> | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note <input checked="" type="checkbox"/> ICD-10 Date: 20-Sep-2017 Description: Unspecified fall, subsequent encounter | <p style="text-align: center;">Yes</p> <p> <input checked="" type="checkbox"/> Antimuscarinic/Antipasmodics <input checked="" type="checkbox"/> Sedative Hypnotics <input checked="" type="checkbox"/> Herb Alternatives <input checked="" type="checkbox"/> Antidepressants <input checked="" type="checkbox"/> Anticonvulsants <input checked="" type="checkbox"/> CNS Medications <input checked="" type="checkbox"/> Appetite Suppressants <input checked="" type="checkbox"/> Antipsychotics </p> | Not Scheduled |

OTHER UNIQUE FEATURES: UNSTRUCTURED DATA



Fall Risk Assessment Report

Patient Summary View : w/ Fall in the Last Year

Report User: VHA19\VHASLCCBurnZ

Data Last Refreshed: 8/7/2018 12:00:00 AM

Provider:

| | Evidence of Recent Fall | Actively on High Risk Medication? | Upcoming Appointment |
|--|---|---|----------------------|
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note | ✓ ICD-10 Date: Description: | Yes ✓ Antimuscarinic/Antipasmodics ✓ Sedative Hypnotics ✓ Herb Alternatives ✓ Antidepressants ✓ Anticonvulsants ✓ CNS Medications ✓ Appetite Suppressants ✓ Antipsychotics | Not Scheduled |
| "Vet had a fall trying to go to the bathroom by himself, skin tear on each elbow--No other injury--" | | | |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note | ✓ ICD-10 Date: Description: | Yes ✓ Antimuscarinic/Antipasmodics ✓ Sedative Hypnotics ✓ Herb Alternatives ✓ Antidepressants ✓ Anticonvulsants ✓ CNS Medications ✓ Appetite Suppressants ✓ Antipsychotics | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note | ✓ ICD-10 Date: Description: | Yes ✓ Antimuscarinic/Antipasmodics ✓ Sedative Hypnotics ✓ Herb Alternatives ✓ Antidepressants ✓ Anticonvulsants ✓ CNS Medications ✓ Appetite Suppressants ✓ Antipsychotics | Not Scheduled |
| <input type="checkbox"/> ✓ Clinical Note Expand to View Note | ✓ ICD-10 Date: 20-Sep-2017 Description: Unspecified fall, subsequent encounter | Yes ✓ Antimuscarinic/Antipasmodics ✓ Sedative Hypnotics ✓ Herb Alternatives ✓ Antidepressants ✓ Anticonvulsants ✓ CNS Medications ✓ Appetite Suppressants ✓ Antipsychotics | Not Scheduled |

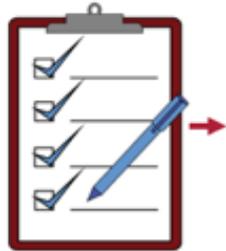
USABILITY TESTING



USABILITY TESTING



Interview Protocol w/
Pre-Defined Tasks

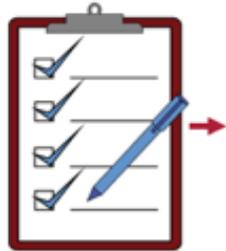


Research-Based Web Design & Usability Guidelines.
U.S. Dept. of Health and Human Services. 2006.

USABILITY TESTING



Interview Protocol w/
Pre-Defined Tasks



Virtual Observation
(i.e. Screen Share)

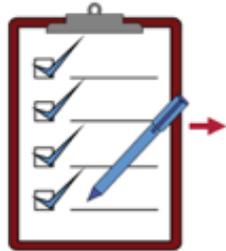


Research-Based Web Design & Usability Guidelines.
U.S. Dept. of Health and Human Services. 2006.

USABILITY TESTING



Interview Protocol w/
Pre-Defined Tasks

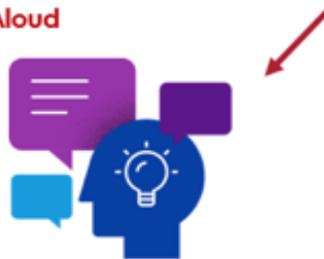


Virtual Observation
(i.e. Screen Share)



Research-Based Web Design & Usability Guidelines.
U.S. Dept. of Health and Human Services. 2006.

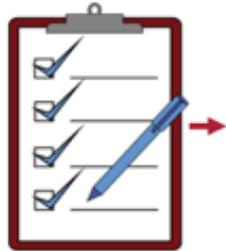
Think-Aloud



USABILITY TESTING



Interview Protocol w/
Pre-Defined Tasks

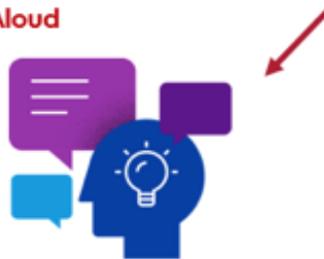


Virtual Observation
(i.e. Screen Share)



Research-Based Web Design & Usability Guidelines.
U.S. Dept. of Health and Human Services. 2006.

Think-Aloud



Retrospective
Probing



Brooke J. SUS--A quick and dirty usability scale.
Usability Evaluation in Industry. 1996;189,4-7.

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Intent/Trust



Ease of Navigation



Interpretability



Accuracy



USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

User Guide: Beers Medication Report

Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program

Ease of Navigation



Interpretability



Accuracy



USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy



User Guide: Beers Medication Report

GO BACK



Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh



Beers Report
Patient Summary View

Department of Veterans Affairs
Geriatric Scholars Program

*****LIMITED USE VERSION FOR DEMONSTRATION ONLY*****

User Guide ([click here](#))

Report User:

Data Last Updated: 5/20/2019

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy



User Guide: Beers Medication Report

GO BACK



Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh



Beers Report
Patient Summary View

Department of Veterans Affairs
Geriatric Scholars Program

*****LIMITED USE VERSION FOR DEMONSTRATION ONLY*****

[User Guide \(click here\)](#)

Report User:

Data Last Updated: 5/20/2019



Choose **VA**

VA



U.S. Department
of Veterans Affairs

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy



User Guide: Beers Medication Report

GO BACK



Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program



***LIMITED USE VERSION FOR DEI



Am I in trouble?

Why is it red?

Is this good or bad?

What should I do?

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy



User Guide: Beers Medication Report

GO BACK



Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program



Beers Report
Patient Summary View

***LIMITED USE VERSION FOR DE

Osteoporosis Screening
Status

(Click on screening methods to drill down)

Screening

! Veteran needs osteoporosis screening

DEXA Scan

Active Osteoporosis Rx

Manual Screening Entry

See More



Click Here to Enter Screening

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy



User Guide: Beers Medication Report

GO BACK



Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program



Beers Report
Patient Summary View

***LIMITED USE VERSION FOR DE

Osteoporosis Screening
Status

(Click on screening methods to drill down)

Screening

Veteran needs osteoporosis screening

DEXA Scan

Active Osteoporosis Rx

Manual Screening Entry

See More



Click Here to Enter Screening

USABILITY TESTING RESULTS

Feedback Concentrated in the Following 4 Domains:

Ease of Navigation



Interpretability



Accuracy

User Guide: Beers Medication Report

GO BACK

Issue 1; Draft D
June 14, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program



***LIMITED USE VERSION FOR DE

Osteoporosis Screening Status

(Click on screening methods to

Screening

DEXA Scan

Active Osteoporosis

Manual Screening

**Click Here to Enter Scre

Data Documentation: Beers Medication Report

February 1, 2017

Organizing Team

Author: Zach Burningham
Support: Josea Kramer
Brian Sauer
Regina Richter
Chris Leng
Celena Peters
Tina Huynh

Department of Veterans Affairs
Geriatric Scholars Program

FUTURE DIRECTION: 2.0 VS 3.0

Goal: Facelift, Less Clicks/More Digestible

FUTURE DIRECTION: 2.0 VS 3.0

Goal: Facelift, Less Clicks/More Digestible



Report User:
Data Last Uploaded: 5/17/2019

[Individual Patient
Lookup](#)

[User Guide \(click here\)](#)
[Data Definitions Documentation \(click here\)](#)

| | Current Panel Size 65+ Years of Age | 2019 AGS General Beers Criteria | | | | 2019 AGS Beers Drug-Disease Interactions | | |
|------------------------|-------------------------------------|---|-------|--|------|---|------|--|
| | | # of Panel, 65+ years of age, on a Potentially Inappropriate Medication (PIM) for <u>Older Adults</u> | | # of Meds Issued in the Last 6m that Qualify as PIMs | | # of Panel, 65+ years of age w/ <u>Heart Failure</u> on a Potentially Inappropriate Medication (PIM) that may exacerbate this condition | | # of Potentially Inappropriate Medications |
| | N | N | % | N | % | N | % | |
| ALL GERIATRIC SCHOLARS | 108,299 | 46,852 | 43.3 | 46,513 | 8.8 | 622 | 0.6 | |
| XXXXXXXXXX, XXXXXXXX | 725 | 413 <input type="checkbox"/> # of Panel by Therapeutic Class | 56.97 | 461 | 12.3 | 9 | 1.24 | |

Trends:
[Click here](#) to view past prescribing history of PIMs
[Click here](#) to view your QI tracking summary



Defining EXCELLENCE in the 21st Century

This reporting system has been developed by the Geriatric Scholars Program in collaboration with the Veterans Rural Health Resource Center - Salt Lake City, UT and VERITAS.

Problems? Feedback is Welcome! [Click here to contact us.](#)

FUTURE DIRECTION: 2.0 VS 3.0

Actions • | ⏪ | ⏩ | 🔍 Find Next | 100%



Beers Medication Dashboard



Potentially Inappropriate Medications (PIMs) Prescribed to Older Veterans

Provider Name: _____

23 patients in panel
33 prescriptions written

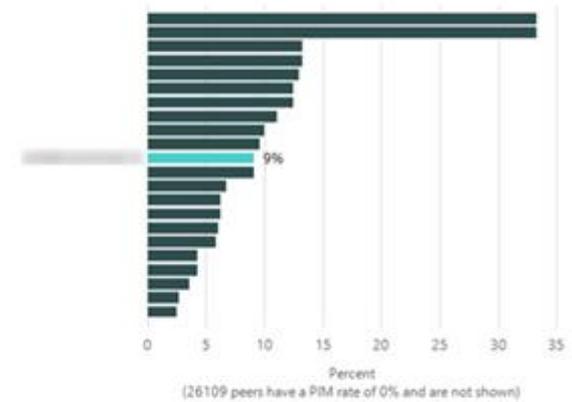
Percentage of Beers Medications Prescribed in the last 30 Days

(Select Percentage to Drill Down)



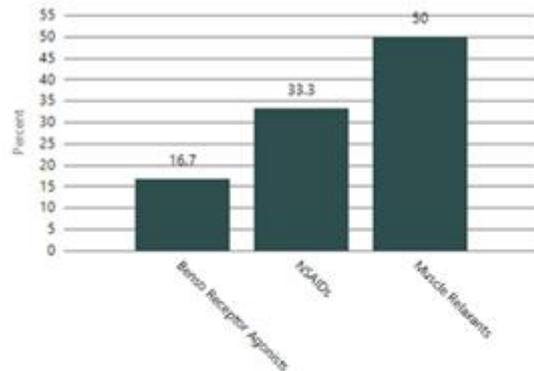
Peer to Peer Benchmarks:
Percentage of Beers Medications Prescribed in the last 30 Days

(Select Bar to Drill Down)



Distribution of PIMs Prescribed in the Last Year by Therapeutic Class

(Select Bar to Drill Down)



Key Performance Indicators

30-Day PIM Rate has ↑ by 9.1 Percentage Points Compared to Prior 30 Days



30-Day PIM Rate has ↑ by 1.6 Percentage Points Compared to Prior 6m Avg



Past Prescribing History: Monthly Percent of Beers PIMs Issued



Report User: VHA19VHASLCLBWHZ
Data Last Refreshed: 2/14/2019 12:00:00 AM

Problems? Feedback is Welcome!
[Click here to contact us.](#)

FUTURE DIRECTION: GERIATRIC SCHOLARS CUBE

Goal/Purpose:

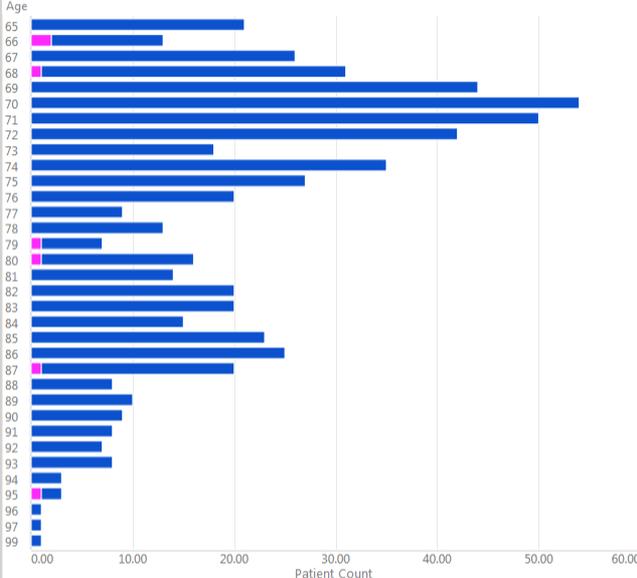
- Further Address Trust/Accuracy
- Enhance Freedom
- Better Inform Dashboard Selection

FUTURE DIRECTION: GERIATRIC SCHOLARS CUBE

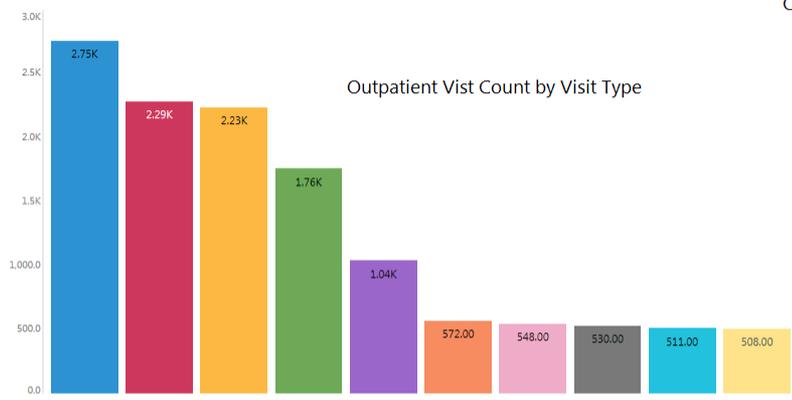
Patient Panel Characteristic Dashboard

Staffname - Primary Care Provider

Panel Count by Age and Gender



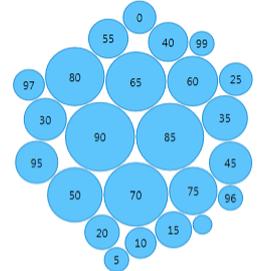
Patient Gender
F M



Outpatient Vist Count by Visit Type

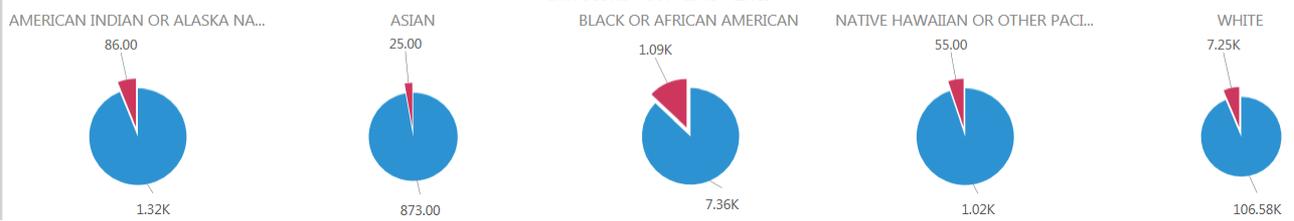
Primary Stop Code
 323 - AMBULATORY CARE (1) | 324 - TELEPHONE/MEDICINE | 108 - LABORATORY
 -1 - "Missing" | 338 - TELEPHONE PRIMARY CARE | 203 - AUDIOLOGY
 105 - X-RAY | 160 - CLINICAL PHARMACY | 502 - ANNISTON MH
 669 - COMMUNITY CARE CONSULT

Common CAN Scores Among Panel



Panel Count by Race & CAN Score

CAN SCORE > 90? No Yes



10 Most Common Drugs Filled

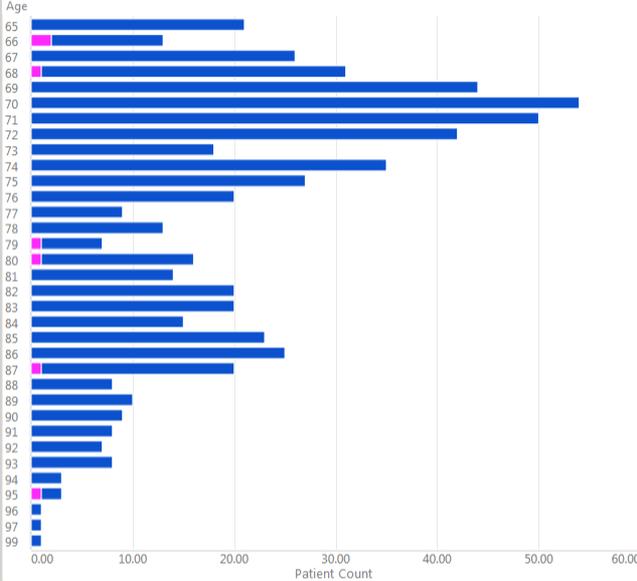
| Drug Name With Dose | Number of Drug Fills |
|---|----------------------|
| INSULIN GLARGINE U-100 10ML/VIAL | 445.00 |
| OMEPRAZOLE 20MG EC CAP | 420.00 |
| SILDENAFIL CITRATE 100MG TAB | 348.00 |
| TAMSULOSIN HCL 0.4MG CAP | 321.00 |
| SIMVASTATIN 80MG TAB | 269.00 |
| ALBUTEROL 90MCG (CFC-F) 200D ORAL INHL | 254.00 |
| CLOPIDOGREL 75MG TAB | 248.00 |
| HYDROCHLOROTHIAZIDE 25MG TAB | 245.00 |
| BUDESONIDE 160/FORMOTER 4.5MCG 120D INH | 230.00 |
| AMLODIPINE 10MG TAB | 223.00 |

FUTURE DIRECTION: GERIATRIC SCHOLARS CUBE

Patient Panel Characteristic Dashboard

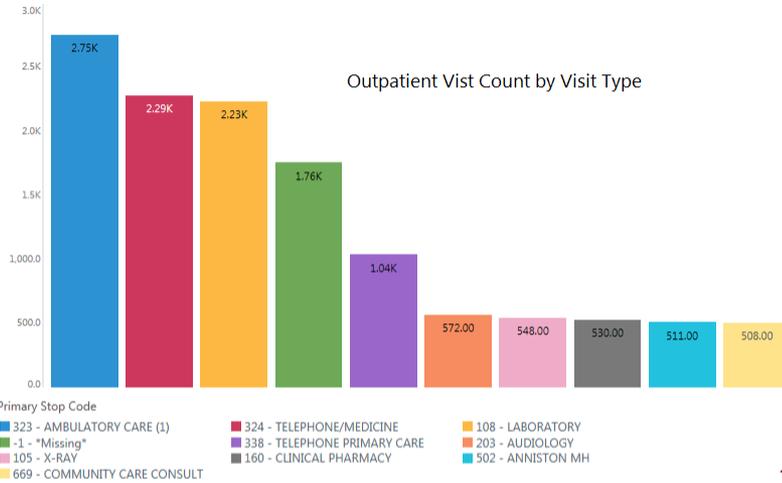
Staffname - Primary Care Provider

Panel Count by Age and Gender

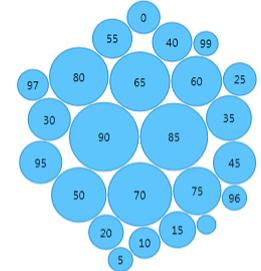


Patient Gender
 F
 M

Outpatient Vist Count by Visit Type

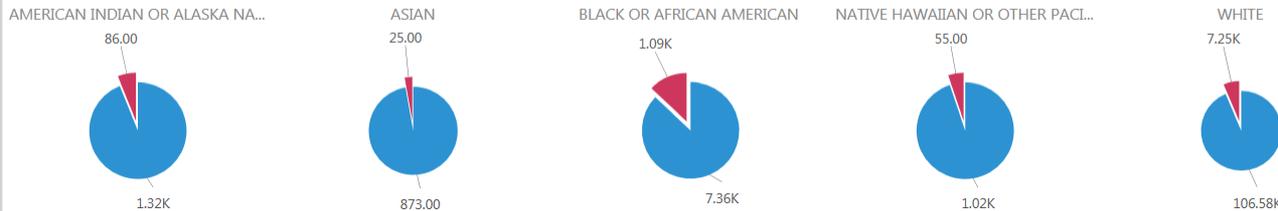


Common CAN Scores Among Panel



Panel Count by Race & CAN Score

CAN SCORE > 90? No Yes



10 Most Common Drugs Filled

| Drug Name With Dose | Number of Drug Fills |
|---|----------------------|
| INSULIN GLARGINE U-100 10ML/VIAL | 445.00 |
| OMEPRAZOLE 20MG EC CAP | 420.00 |
| SILDENAFIL CITRATE 100MG TAB | 348.00 |
| TAMSULOSIN HCL 0.4MG CAP | 321.00 |
| SIMVASTATIN 80MG TAB | 269.00 |
| ALBUTEROL 90MCG (CFC-F) 200D ORAL INHL | 254.00 |
| CLOPIDOGREL 75MG TAB | 248.00 |
| HYDROCHLOROTHIAZIDE 25MG TAB | 245.00 |
| BUDESONIDE 160/FORMOTER 4.5MCG 120D INH | 230.00 |
| AMLODIPINE 10MG TAB | 223.00 |

FUTURE DIRECTION: GERIATRIC SCHOLARS CUBE



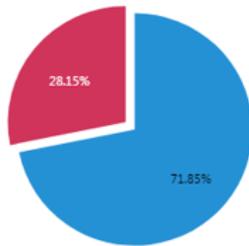
Please Select Primary Care Provider

Geriatric Scholars Data Cube: QI Project Measures



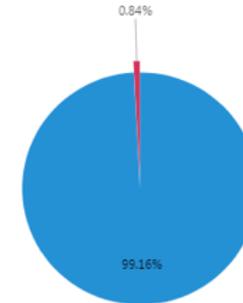
Patient Characteristics Healthcare Utilization **QI Project Measures**

of Patient on Beers Medication



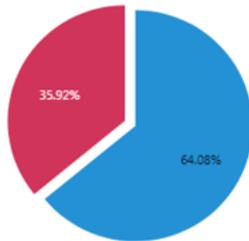
[Launch Beers Medication Report](#)

of Patients Hospitalized for ACSC in the Last Year



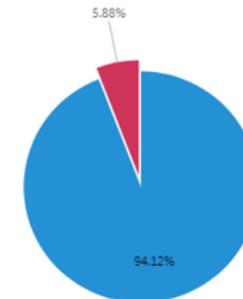
[Launch Ambulatory Care Sensitive Condition Report](#)

of Patients at Risk for a Psychiatric Admission



[Launch Psychiatric Hospitalization Risk Report](#)

of Patients at Risk for Osteoporosis and Not Screened



[Launch Osteoporosis Risk Assessment Report](#)



Choose VA

VA



U.S. Department of Veterans Affairs

FUTURE DIRECTION: GERIATRIC SCHOLARS CUBE



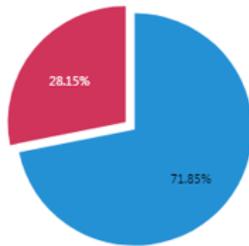
Please Select Primary Care Provider

Geriatric Scholars Data Cube: QI Project Measures



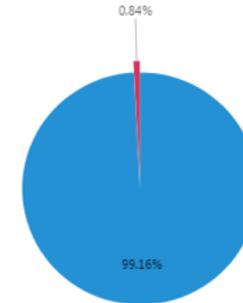
Patient Characteristics Healthcare Utilization **QI Project Measures**

of Patient on Beers Medication



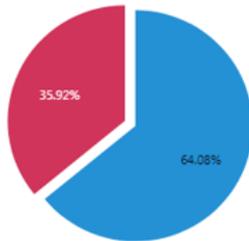
[Launch Beers Medication Report](#)

of Patients Hospitalized for ACSC in the Last Year



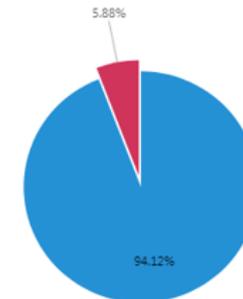
[Launch Ambulatory Care Sensitive Condition Report](#)

of Patients at Risk for a Psychiatric Admission



[Launch Psychiatric Hospitalization Risk Report](#)

of Patients at Risk for Osteoporosis and Not Screened



[Launch Osteoporosis Risk Assessment Report](#)



Choose **VA**

VA



U.S. Department of Veterans Affairs

FUTURE DIRECTION: DATA INTAKE REQUEST SYSTEM

Goal: To Support Delivery of Custom Reports

- Phase 1
 - Capture Information in Structured Way
 - Upon Submission of Request, Workflows Generated
- Phase 2
 - Remove Human Component, Reduce Workload on Staff
 - Menu of Items User Could Self-Select
 - Medications
 - Diagnoses
 - Procedures
 - Date Ranges
 - Etc.
- Phase 3
 - Use Requests to Target Future Dashboards



Questions?

zachary.burningham@va.gov