MISSION 401:
FY21 Primary Care Underserved Model Updates

November 2020

PEPReC
Partnered Evidence-based Policy Resource Center
A VA QUERI Program

QUERI
VA Quality Enhancement Research Initiative

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Law overview

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"Development of criteria for designation of certain medical facilities of the Department of Veterans Affairs as underserved facilities and plan to address problem of underserved facilities."

- Certain factors required by law (Veteran to provider ratio, range of specialties provided, wait times, local community access, etc.)
- Measure and report underservedness at least once a year
- Use MISSION 401 to guide resource allocation in MISSION 402

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Underservedness

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- **Evidence-based approach** – statistical modeling of supply and demand

- **Underservedness** – the imbalance between Veteran demand for primary care and a VAMC's supply of primary care

- **Underserved score** – *adjusted, predicted* new patient wait time
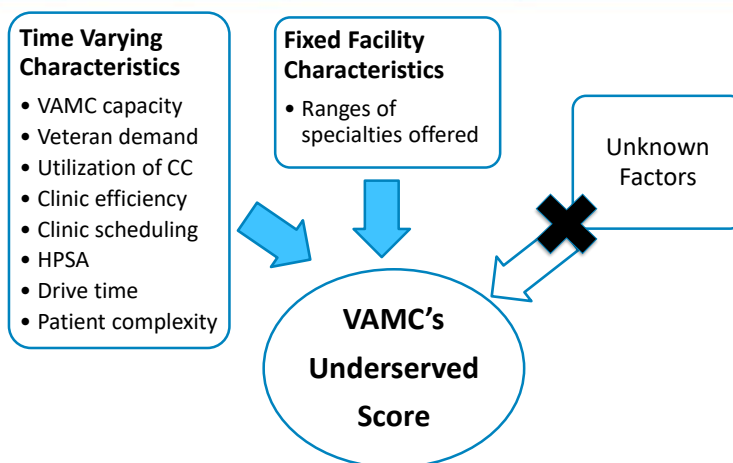
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Model overview

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Time Varying Characteristics
- VAMC capacity
- Veteran demand
- Utilization of CC
- Clinic efficiency
- Clinic scheduling
- HPSA
- Drive time
- Patient complexity

Fixed Facility Characteristics
- Ranges of specialties offered

Unknown Factors

VAMC's Underserved Score

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Variable influence
FY20 – June CMR

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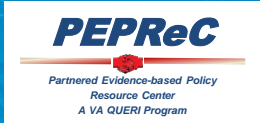
VARIABLE	NON-NUMERICAL WEIGHT
Time-varying characteristics	
1. Percentage of Veterans over 65 years old	- HIGH
2. Household median income	- HIGH
3. IM/Geri provider FTEs per 1000 enrollees	- HIGH
4. Percentage of Priority Groups 7 or 8 Veterans	- HIGH
5. Medicare Advantage community penetration	- HIGH
6. Zillow House Value Index	+ MED
7. Nosos risk adjustment score	- MED
8. Community health insurance coverage	+ MED
9. Community unemployment rate	- MED
10. PI^2 Score	- MED
11. Unique community care patients	+ LOW
12. Dollars spent on community care	+ LOW
13. HPSA score	+ LOW
14. Drive time & distance	+ LOW
15. RVUs per IM/Geri FTE	- LOW
16. PACT Panel Size	- LOW
Fixed facility characteristics	
17. Mental health program complexity	+ LOW
18. ICU/surgical program complexity	+ LOW
19. Complex clinical program complexity	+ LOW

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Top 10 underserved PC facilities
FY20 – June 2020 CMR

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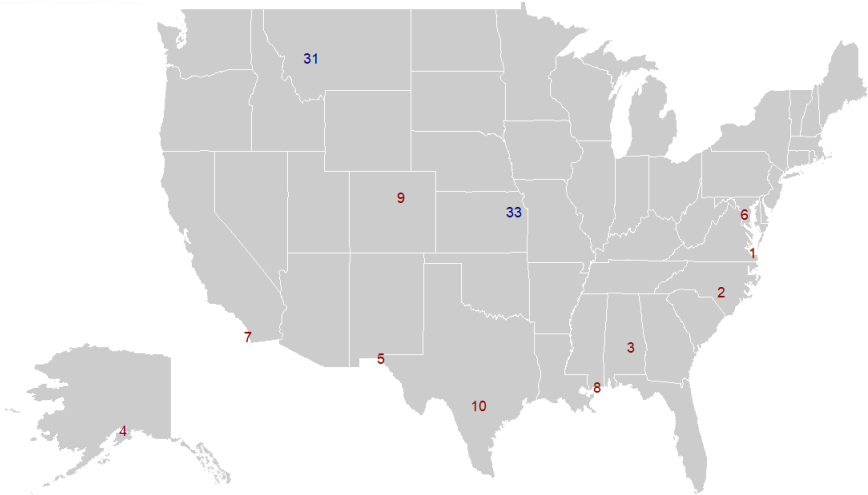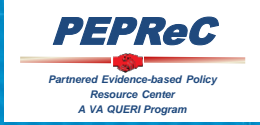
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FY21 Model Changes
Overview

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- **We find the models to be accurate and effective at assessing underservedness**
  - Wait times are validated
  - Strong relationships between independent and dependent variables
  - Facilities agreed with designation

- **We continually improve the models by adding new variables, updating variable construction, and incorporating stakeholder feedback**
  - Clinic capacity
  - Clinic efficiency
  - Established patient scheduling
  - Veteran age

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FY21 Model Changes
Clinic capacity

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- **Updated variable construction; variable substituted**
  - Total clinic time per Veteran enrollee – observed clinic time exhibits a more direct relationship with patient access

  - Reported FTE data – inadequate sensitivity to changes in clinic capacity

  - Includes all providers who generate workload in the primary care clinics
  - Observation at the provider-day level – flexibility, optimal for testing additional considerations
  - Translatable to established units (e.g. FTEs)
  - Alternative site virtual care capacity assigned to patient-site

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FY21 Model Changes
Clinic efficiency

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- **New variable**
  - Total clinical encounters per day of clinic capacity – an important element of clinical operations that mediates the relationship between clinic inputs and total production

  - Impact on waiting times is analogous to adding additional staff
  - Includes all types of in-person and virtual encounters where a provider is observed performing an outpatient service
  - *Provides facilities with a new tangible mitigation strategy*

  - VISN 1 pilot program – targeted enhancements to clinic efficiency to improve access outcomes

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FY21 Model Changes
Established patient scheduling

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- **New variable**
  - Percentage of established patient appointments scheduled more than 90 days in advance

  - Scheduling practices have been shown to directly impact new patient wait times
  - Past policy initiatives have aimed to address this practice to reduce cancellations and avoid crowd-out of new patients (Recall Reminder)
  - *Provides facilities with a new tangible mitigation strategy*

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FY21 Model Changes
Veteran age

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- **New variable(s)**
  - *Continuous age variable* – captures age health effect (gradient demand)
  - *Percentage of Veterans under 55yo* – accounts for younger Veterans who demand less health care overall

  - Example of how qualitative feedback from management teams can lead to model improvements

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FY21 Status & Next Steps

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- **FY21 Status**
  - Most updated variables constructed now
  - Processing new drive time data from PSSG
  - Estimating FY21 models to produce new ranking in November

- **Next Steps (with OVAC)**
  - Brief affected VISN and VAMC leadership
  - Include ranking in Report to Congress
  - Consult with field on action planning

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