Learning from Low-Cost Evaluations: 2019 OES Results

@USGSA
#OESatGSA
Increasing Use of Patient-Generated Health Data (PGHD)
A collaboration between OES and HHS
Increasing Use of Patient-Generated Health Data (PGHD)  
_A collaboration between OES and HHS_

The intervention group received a training to place bulk orders for electronic blood glucose flow sheets for patients with diabetes.

The control group received no training.
Increasing Use of Patient-Generated Health Data (PGHD)
A collaboration between OES and HHS

- Basic Reminder
- Provider Accountability
- Gift Card
- No Reminder
Training and Encouragement to Providers Significantly Increases Patient Use of Flowsheets

N: 7,052 patients
68 doctors

Control Practices
Treatment Practices

% of Patients Using Flowsheets

0.1 0.2

1-14 weeks 15-26 weeks
Reminder Messages to Patients Significantly Increase Patient Use of Flowsheets

Study Group (N: 2,182 Patients)

- No reminder: 5.8%
- Basic: 7.4%
- Gift card: 7.4%
- Provider accountability: 8.9%
Timely Wage Reporting Among SSI Recipients

A collaboration between OES and SSA
Please read the important reporting information in this letter.

**Reporting Changes to your Supplemental Security Income (SSI) Benefits**

This notice is a reminder that you need to tell us about your wages, your income, or other changes that may affect your Supplemental Security Income (SSI) payments. We list other changes you need to report on the back of this notice.

You need to let us know because:

- you need to receive the correct payment; and
- you may need to pay us back if you receive too much money.

Over 200,000 persons who receive SSI report new wages to us each month. If you do not report your wages to us on purpose, we can stop your SSI payments.
Reminder letters to SSI recipients significantly increase timely reporting of wages

- After 3 months:
  - No letters: 0.97
  - Any letter: 1.3
- After 8 months:
  - No letters: 3.06
  - Any letter: 3.38

N: 50,000
SSI Recipients
Using Proactive Communication to increase College Enrollment for Post-9/11 GI Bill Beneficiaries

A collaboration between OES and VA
Using Proactive Communication to increase College Enrollment for Post-9/11 GI Bill Beneficiaries

A collaboration between OES and VA

From: Veterans Benefits Administration [mailto:Veteransbenefits@public.govdelivery.com]
Sent: {Date}
To: {Email Address}

Subject: Maximizing Your Post 9/11 GI Bill Education Benefits

{Date}

Dear {First Name},

Enroll full-time this semester to maximize your Post 9/11 GI Bill education benefits. Register online or contact your school’s registrar’s office to ensure your class schedule is complete.

Potential Benefits of Enrolling Full-Time:

You could earn more money: Each year you delay completing your college degree could cost you up to $65,000 in lifetime earnings.

You could save money: When you exhaust all 36 months of your Post 9/11 GI Bill education benefits you will be responsible for all costs associated with your education. Enrolling in an extra course this semester, while you still have your education benefits, may not cost you any extra in tuition and fees.

You could increase your student financial aid: Your Post 9/11 GI Bill benefits do not impact your eligibility for additional federal financial aid — like Pell Grants — and you may qualify for additional grants based on your income and family situation. To apply, complete a Free Application for Federal Student Aid (FAFSA) at https://fafsa.ed.gov/.

If You Have Questions or Need Assistance

If you have questions or need assistance with your GI Bill benefits, contact VA at 1-888-GI-BILL-1 (1-888-442-4551). If you use the Telecommunications Device for the Deaf (TDD), the Federal number is 711.

Further information may also be found on our website at https://benefits.va.gov/gibill/.
Proactive Communication Significantly Increases College Enrollment for Post-9/11 GI Bill Beneficiaries

<table>
<thead>
<tr>
<th>Email Group</th>
<th>No e-mail</th>
<th>Proactive e-mail</th>
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</thead>
<tbody>
<tr>
<td>Rate of Pursuit</td>
<td>74.6</td>
<td>75.3</td>
</tr>
<tr>
<td>(N: 100,908 Veterans)</td>
<td></td>
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</table>
Increasing Vaccine Uptake Among Veterans at the Atlanta VA Health Care System
A collaboration between OES and VA
Increasing Vaccine Uptake Among Veterans
A collaboration between OES and the Atlanta VA Health Care System

VACCINATION DOCUMENTATION

☐ Your patient is DUE for the following vaccines: Click box to review the clinical reminder findings.
☐ Click here to view IMMUNIZATION HISTORY
☐ Click here to review a summary of VHA guidance for these vaccines.

***INSTRUCTIONS***
Use language that assumes the patient will get vaccinated - "It is time for your X shot today"
**Increasing Vaccine Uptake Among Veterans**  
*A collaboration between OES and the Atlanta VA Health Care System*

---

**Bundled vaccination reminder**

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Status</th>
<th>Due Date</th>
<th>Last Done</th>
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</thead>
<tbody>
<tr>
<td>Pneumococcal PCV13 (Prevnar13)</td>
<td>DUE NOW</td>
<td>DUE NOW</td>
<td>unknown</td>
</tr>
<tr>
<td>Tdap Immunization</td>
<td>DUE NOW</td>
<td>DUE NOW</td>
<td>unknown</td>
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</table>

**CLINICAL REMINDERS SUMMARY**

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<th>Status</th>
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<th>Last Done</th>
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<tbody>
<tr>
<td>Pneumococcal PCV13 (Prevnar13)</td>
<td>DUE NOW</td>
<td></td>
<td>unknown</td>
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<tr>
<td>Pneumococcal PPSV23 (Pneumovax)</td>
<td>N/A</td>
<td>DUE NOW</td>
<td>05/21/2019</td>
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<tr>
<td>Td Immunization</td>
<td>DONE</td>
<td></td>
<td></td>
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<tr>
<td>Tdap Immunization</td>
<td>DUE NOW</td>
<td>DUE NOW</td>
<td>unknown</td>
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Increasing Vaccine Uptake Among Veterans
A collaboration between OES and the Atlanta VA Health Care System

<table>
<thead>
<tr>
<th>Immunization</th>
<th>Series Date</th>
<th>Facility</th>
<th>Reaction Info</th>
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<tbody>
<tr>
<td>HEPATITIS B - SERIES #1 (HISTORIC*)</td>
<td>06/26/2014</td>
<td>ATLANTA VA*</td>
<td></td>
</tr>
<tr>
<td>INFLUENZA (HISTORICAL)</td>
<td>11/24/2009</td>
<td>No Site</td>
<td>&lt;C&gt;</td>
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<tr>
<td></td>
<td>09/20/2007</td>
<td>No Site</td>
<td></td>
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<tr>
<td>INFLUENZA, UNSPECIFIED FORMULATION*</td>
<td>07/05/2010</td>
<td>7th Floor</td>
<td></td>
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<tr>
<td></td>
<td>11/24/2009</td>
<td>No Site</td>
<td>&lt;C&gt;</td>
</tr>
<tr>
<td></td>
<td>10/02/2009</td>
<td>Kroger</td>
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</tr>
<tr>
<td>NOVEL INFLUENZA-H1N1-09, ALL FORM*</td>
<td>11/24/2009</td>
<td>No Site</td>
<td>&lt;C&gt;</td>
</tr>
<tr>
<td>PNEUMOCOCCAL POLYSACCHARIDE PPV23</td>
<td>00/00/2007</td>
<td>No Site</td>
<td></td>
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<tr>
<td></td>
<td>03/15/2002</td>
<td>ATLANTA VA*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>00/00/2002</td>
<td>No Site</td>
<td></td>
</tr>
<tr>
<td>TD(ADULT) UNSPECIFIED FORMULATION B</td>
<td>11/24/2009</td>
<td>No Site</td>
<td></td>
</tr>
<tr>
<td>VARICELLA RECEIVED ELSEWHERE (HIS*</td>
<td>12/01/2009</td>
<td>Publix</td>
<td></td>
</tr>
</tbody>
</table>

Newly designed immunization dashboard
Increasing Vaccine Uptake Among Veterans
A collaboration between OES and the Atlanta VA Health Care System

Provider talking points

Prevnar-13 Immunization
Your patient is DUE for an Prevnar 13 vaccination based on information available to this reminder.

If the patient expresses concerns, click box to follow example below:

- a. Establish empathy and credibility - establish a connection
  - i. “I know that you want to do whatever you can to keep yourself healthy - I want the same thing”

- b. Acknowledge the patient’s concern, provider alternative explanation for any myths but do not linger
  - i. “I understand that you are concerned about getting the flu, but the flu vaccine cannot give you the flu - it is a killed vaccine, it doesn’t have any live virus.”

- c. Pivot back to the disease and emphasize self-efficacy
  - i. “Getting the flu is serious for anybody, but can be particularly severe for older individuals. However, if you get the flu vaccine today you can reduce your likelihood of getting the flu and reduce the severity of the flu if you do get it.
    - ii. “It will also lessen the likelihood of spreading to others, including the elderly and immunocompromised. I strongly recommend the flu vaccine, I get it myself.”
Provider Reminders and Talking Points Do Not Significantly Increase Proportion of Patients Vaccinated When Due

<table>
<thead>
<tr>
<th>Study Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N: 23,964 Patients Due for Flu Vaccine; 84 care teams</td>
</tr>
</tbody>
</table>

% who get Flu Vaccine at First Appointment when Due

- Status Quo (EHR Reminder): 21.9%
- Treatment (Modified EHR Reminder): 24.3%
Learning from Unexpected Results
Learning from Unexpected Results

Definition: Unexpected Result

An effect size or direction that runs counter to what prior evidence or informed hypotheses would suggest.
Learning from Unexpected Results

Definition: Null Result

No *statistically significant* difference in outcome between an intervention and a control (no-intervention) condition, or between two different interventions or versions of an intervention.

This does NOT mean that we can conclude the intervention is ineffective or that we say the intervention has no effect.
More Null Results in Health Published in Recent Years

Kaplan and Irvin (2015)

Year 2000:
Registration of primary outcomes required on ClinicalTrials.gov

Relative risk of primary outcome vs Publication year
Null Results Can Occur for Several Reasons

Results of Field Trials since 2015 by Office of Evaluation Sciences

- Baseline rate
- Study design
- Intervention design

Bar chart showing positive and null results.
Reason 1: Baseline take-up rate and outcome

FACT: Getting vaccines during pregnancy is the best way to protect babies from getting the flu and whooping cough.
Low Baseline Take-up Associated with Null or Negative Effects in Many Tests of Informational Nudges

Coffman et al. 2018

Three observations from Krupka & Weber (2009) and one from Brown et al. (2015) have treatment effects outside the range of the vertical axis.
Reason 2: Small Sample Size or Mismatched Study Design

![Bar chart 1: Retention in Care](chart1)

- **1 Month:** 67.4%
- **3 Month:** 68.3%
- **6 Month:** 52.6%

N: 866 HIV+ individuals

- Standard of Care
- Praise Message

![Bar chart 2: % Adherence to ART](chart2)

- **1 Month:** 67.4%
- **3 Month:** 68.3%
- **6 Month:** 52.6%

N: 866 HIV+ individuals

- Standard of Care
- Praise Message
Reason 3: Intervention Design Not Strong Enough

% who contribute to Flexible Spending Account

<table>
<thead>
<tr>
<th>Email Group</th>
<th>No targeted communication</th>
<th>Any targeted communication (pooled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N: 11,192 GSA Employees)</td>
<td>27.4</td>
<td>27.2</td>
</tr>
</tbody>
</table>
Learning from Unexpected Results

Questions to ask when planning a study:

1. Does the baseline information about the program, customers, and the outcome suggest they can be changed?

2. Does the study design, including the sample size at the level of randomization, provide a strong foundation for detecting a change in outcomes?

3. Does the intervention’s theory of change match the problem is it trying to solve?

   Are the mode, timing, and messenger appropriate and strong enough to address those barriers and change outcomes for the intervention group?
Ways to Interpret and Act on Nulls

Unexpected and Null Results Can Help Build Federal Evaluation Plans and Learning Agendas

Some misconceptions about unexpected or null results in Federal evaluation:

**Misconception:** Null results are rare.

**Truth:** All interventions cannot or will not be effective. As noted above, more null results are being published than before for interventions in health and social sciences. One-third of completed evaluations by the Office of Evaluation Sciences (OES) with federal agency partners had null results. As agencies conduct more research, they are likely to encounter studies that do not show

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Office of Evaluation Sciences | General Services Administration
oes.gsa.gov
Learning from Unexpected Results

Panel:

- **Calvin Johnson**, Deputy Assistant Secretary
  Office of Policy Development and Research, HUD

- **Susan Wilschke**, Evaluation Officer, Acting
  Associate Commissioner
  Office of Research, Demonstration, and
  Employment Support, SSA
Learning from Unexpected Results

Takeaways:

1. When building and using evidence, you will at times experience unexpected results, including null results.

2. As you plan studies in the future, consider ways to strengthen the intensity of the intervention being tested, and set expectations about likely effect sizes given the intervention scope and strength.

3. All results can be used to advance your evaluation plans and inform program design and implementation.
Learning from Administrative Data
Increasing FAFSA Completion by HUD-Assisted Youth

A collaboration between OES, HUD, and ED
Increasing FAFSA Completion by HUD-Assisted Youth
A collaboration between OES, HUD, and ED
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Increasing FAFSA Completion by HUD-Assisted Youth
A collaboration between OES, HUD, and ED
Reducing Inappropriate Prescribing of Quetiapine in Medicare Part D
A collaboration between OES and HHS

Effect of Peer Comparison Letters for High-Volume Primary Care Prescribers of Quetiapine in Older and Disabled Adults
A Randomized Clinical Trial

Adam Sacarny, PhD, Michael L. Barnett, MD, MS; Jackson Le, PharmD; Frank Tetioudhi, RPh; David Yolum, PhD; Shanthu Agrawal, MD

IMPORATANCE Antipsychotic agents, such as quetiapine fumarate, are frequently overprescribed for indications not supported by clinical evidence, potentially causing harm.

OBJECTIVE To investigate if peer comparison letters targeting high-volume primary care prescribers of quetiapine meaningfully reduce their prescribing.

DESIGN, SETTING, AND PARTICIPANTS Randomized clinical trial (intent to treat) conducted from 2015 to 2017 of prescribers and their patients nationwide in the Medicare program. The trial targeted the 5055 highest-volume primary care prescribers of quetiapine in 2013 and 2014 (approximately 5% of all primary care prescribers of quetiapine).

INTERVENTIONS Prescribers were randomized (1:1 ratio) to receive a placebo letter or 3 peer comparison letters stating that their quetiapine prescribing was high relative to their peers and was under review by Medicare.

MAIN OUTCOMES AND MEASURES The primary outcome was the total quetiapine days supplied by prescribers from the intervention start to 9 months. Secondary outcomes included quetiapine receipt from all prescribers by baseline patients, quetiapine receipt by patients with low-value or guideline-concordant indications for therapy, mortality, and hospital use. In exploratory analyses, the study followed outcomes to 2 years.

RESULTS Of the 5055 prescribers, 231 (4.6%) were general practitioners, 2428 (48.0%) were in family medicine, and 2396 (47.4%) were in internal medicine; 4155 (82.2%) were male. All were included in the analyses. Over 9 months, the treatment arm supplied 11.1% fewer quetiapine days compared with the control arm (P=.054; 95% confidence interval, −1.9% to 24.2%).
Reducing Inappropriate Prescribing of Quetiapine in Medicare Part D
A collaboration between OES and HHS
Reducing Inappropriate Prescribing of Quetiapine in Medicare Part D
A collaboration between OES and HHS

Takeaways:

1. Start data access early
2. Identify agency and contractor data experts
3. Learn what you can do yourself
Using the Military Health System Opioid Registry to Identify and Reduce Concurrent Opioid-Benzodiazepine Prescriptions

A collaboration between OES and DoD
Using the Military Health System Opioid Registry to Identify and Reduce Concurrent Opioid-Benzodiazepine Prescriptions

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Using the Military Health System Opioid Registry to Identify and Reduce Concurrent Opioid-Benzodiazepine Prescriptions
A collaboration between OES and DoD

Jun 2015 - Feb 2016

Data Discovery and Analytics

Collaborative Research

Ask

Study

Pharmacy/Opioid metrics - Dec 2017

Measure

Opioid Use Case

Manage

Act

Clinical Decision Support

Data and Registries

Dec 2016

Ft. Carson Morphine Equivalence Daily Dose (MEDD) pre/post analysis
Using the Military Health System Opioid Registry to Identify and Reduce Concurrent Opioid-Benzodiazepine Prescriptions

A collaboration between OES and DoD

Patient Look-up
Scan or enter a barcode / EDIPN / SPONSSN to view patient data.
NOTE: Please send suggestions/feedback/complaints to Judith Rosen and Archie Blockhorst

Please select your duty location: Other / Population Health Activity

![Graph showing MEDD over time with data points for different dates from 2017 to 2018]

Current MEDD: 100
RISORD Index Score: 71
Probable or Opioid Induced Respiratory Depression: 96%
Last Naloxone: No record of dispensing in the past year
Solo Prescriber: None assigned

Opioid Dispensing History:
- 12/07/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 11/15/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 09/11/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 08/08/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 07/17/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 06/16/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 05/25/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 04/27/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 03/26/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)
- 02/17/2017: TAPENTadol HCL 75MG #120 DS30 (HEB PHARMACY #678)

Benzod Dispensing History:
- 12/19/2017: CLONAZEPAM 1 MG TAB #90 DS30 (WILFORD HALL MEDICAL CTR)
- 12/19/2017: CLONAZEPAM 1 MG #90 DS30 (WILFORD HALL AMBULATORY CTR)
- 12/04/2017: CLONAZEPAM 1 MG TAB #90 DS30 (WILFORD HALL MEDICAL CTR)
- 11/28/2017: CLONAZEPAM 1 MG #90 DS30 (WILFORD HALL AMBULATORY CTR)
- 11/15/2017: CLONAZEPAM 1 MG #90 DS30 (WILFORD HALL MEDICAL CTR)
- 10/20/2017: CLONAZEPAM 1 MG TAB #90 DS30 (WILFORD HALL MEDICAL CTR)
- 10/03/2017: CLONAZEPAM 1 MG #90 DS30 (WILFORD HALL AMBULATORY CTR)
- 09/11/2017: CLONAZEPAM 1 MG TAB #90 DS30 (WILFORD HALL MEDICAL CTR)
- 08/16/2017: CLONAZEPAM 1 MG #90 DS30 (WILFORD HALL AMBULATORY CTR)
- 07/11/2017: CLONAZEPAM 1 MG TAB #90 DS30 (WILFORD HALL MEDICAL CTR)

RISORD Criteria:
- Current MEDD > 100: 10 pts
- Diagnosis of opioid dependence in the past 6 months: 15 pts
- Current benzodiazepine usage: 4 pts
- Current antidepressant usage: 7 pts
- Diagnosis of opioid or schizophrenia in the past 6 months: 7 pts
- Diagnosis of severe mental illness in the past 6 months: 3 pts
- One or more ED visits in past 6 months: 11 pts
- Hospitalized in past 6 months: 8 pts

Encounters
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<tr>
<th>Date</th>
<th>Location</th>
<th>Specialty</th>
<th>Diagnosis/Reason</th>
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<tbody>
<tr>
<td>01/09/2018</td>
<td>50th MDW, WHASC-USA LAC/LAND-OP MTF</td>
<td>INTERNAL MEDICINE CLINIC</td>
<td>MED RENEWAL FOR TUESDAY PICKUP</td>
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<tr>
<td>12/07/2017</td>
<td>AMC BROKE-SAMMC-SAM HOUSTON-OP MTF</td>
<td>*CANCEL + ONCOLOGY CLINIC</td>
<td>NO CCS GROUPING</td>
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</table>

Medications
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<th>Date</th>
<th>Pharmacy Name</th>
<th>Drug Name</th>
<th>Product Name</th>
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<tbody>
<tr>
<td>01/04/2018</td>
<td>WILFORD HALL AMB CTR</td>
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<tr>
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<td>12/27/2017</td>
<td>WILFORD HALL AMB CTR</td>
<td>ESZOPICLONE (LUNESTA OR NEURIO) 7.5 MG TAB</td>
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</tr>
</tbody>
</table>
Using the Military Health System Opioid Registry to Identify and Reduce Concurrent Opioid-Benzodiazepine Prescriptions

*A collaboration between OES and DoD*

**Data Strategies:**

- Share de-identified and synthetic data
- Develop a Virtual Data Environment (VDE)
- Reduce barriers to data access
- Streamline agreements processes
Questions and Answers
Upcoming Events: Workshops for Federal Employees

Registration details at oes.gsa.gov/events/

- **Evidence-Building Success Stories**, 9:00AM-10:15AM, November 22: Interactive session to share success stories of how evidence has been used to strengthen agencies’ programs and policies, and share tips and tricks for creating buy-in and excitement around evidence-building activities in your agency

- **Mapping Strategy to Evidence**, 9:00AM-11:00AM, December 6: This workshop will provide an introduction to mapping agency strategy to the new evidence-building activities required under the Evidence Act, including hands-on practice in drafting Learning Agenda priorities

**Evidence Act Resources:**

- Intergovernmental Personnel Act (IPA) Guide
- Evidence Act Learning Agenda and Evaluation Plan Toolkits
  - Forthcoming resources and training, January 2020
Thank you to our Federal collaborators!

Department of Defense

Department of Health & Human Services

Department of Housing & Urban Development

Department of Veterans Affairs

Social Security Administration
Join our team! Two Fellowship opportunities based in Washington D.C.

- **Annual Fellowship**: Team members work alongside agency collaborators to apply behavioral insights, make concrete recommendations on how to improve government, and evaluate impact using administrative data. One year fellowships begin in Fall 2020. **The application deadline is December 15, 2019.**

- **Evidence Fellowship**: OES is uniquely situated at the center of government to share leading practices, develop resources and build skills in the Federal workforce on evidence and evaluation. Six-month details beginning in January 2020 are **open to Federal employees only**. Applications are reviewed on a rolling basis; **the final application deadline is November 20, 2019.**

Apply today! [https://oes.gsa.gov/contact/](https://oes.gsa.gov/contact/)