



ASPR

HHS emPOWER Program CSTE Disaster Epidemiology Workshop

Joint Program of the
Office of the Assistant Secretary for Preparedness and Response (ASPR)
and the Centers for Medicare & Medicaid Services (CMS) Center for Medicare (CM)
U.S. Department of Health and Human Services

May 18, 2021

Unclassified/For Official Use Only



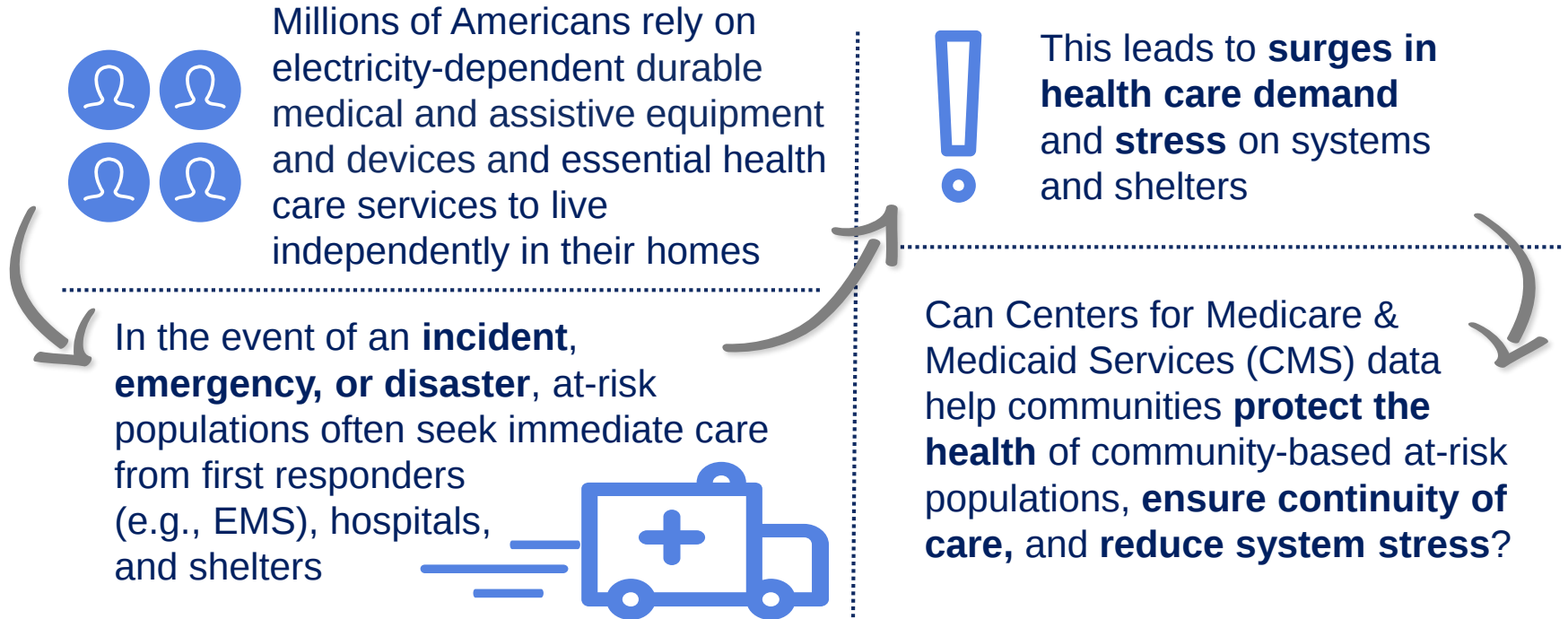
ASPR Mission



HHS emPOWER Program Overview

Why was the HHS emPOWER Program created?

In 2013, the HHS emPOWER Program was created to help address the needs of at-risk populations in communities across America.

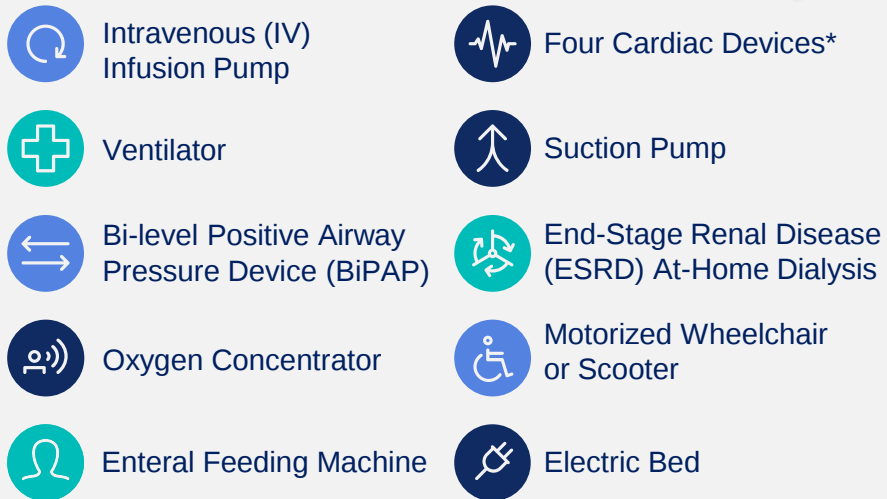


Medicare Data in HHS emPOWER Program Tools

The HHS emPOWER Program uses limited Medicare administrative claims data to provide the **right type of data, in the right tool, to the right person, at the right time**, as outlined below:

HHS emPOWER Map, REST Service, and emPOWER AI

Publicly Available Tools



Emergency Planning De-identified Dataset and Emergency Response Outreach Individual Dataset

Restricted Datasets

The emPOWER restricted datasets include the **DME data and four additional essential health care services:**



*Includes the following four implanted cardiac devices: left, right, and bi-ventricular assistive devices (LVAD, RVAD, BIVAD) and total artificial hearts (TAH).

HHS emPOWER Program Data Overview

The HHS emPOWER Program is comprised of three main elements: data, mapping and interactive tools, and dataset tools.

Data



Mapping & Interactive Tools



Dataset Tools

Services	Services	Services	All Power Dependent	# Cardiac Devices (1 month)	# Ventilators (1 month)	# BPAPs (1 month)
# O2 services (1 month)	# Home health (1 month)	# At Home Respite (1 month)	# Electricity-Dependent Devices and DME			
15	15	15	44	50	11	11
PROFESSIONAL LEVEL DATASET - All in-BRCA individuals POPULATION: American population is represented by all beneficiaries as of November 2014 who are enrolled in Medicare Fee For Service Parts A and B in the 48 states that have the data available for this request. Notes: All data are <i>not</i> available for the following programs only.						
Initial Sorting Order	Name	Other Information	Address Indicators	Indicators	Indicators	Street Address
1	John Smith	November 4, 1944	44	0	0	1100 Main Street
2	Jane Brown	February 10, 1955	44	0	0	1500 Oak Street
3	John Doe	December 10, 1958	44	0	0	1200 Elm Street
4	Jane Doe	March 1, 1960	44	0	0	1800 Pine Street
5	Robert Johnson	May 15, 1965	44	0	0	1900 Birch Street
6	Mary Johnson	September 14, 1971	44	0	0	1700 Cedar Street
7	William Jones	December 1, 1983	44	0	0	1600 Elm Street



This HHS emPOWER Program data is...

- ✓ Monthly claims data on Medicare beneficiaries:
 - ✓ Enrolled in Medicare Fee-For-Service (Parts A and B) or Medicare Advantage (Part C) Programs;
 - ✓ Residing in a personal residence;
 - ✓ With claims for select durable medical or assistive equipment or devices and/or health care services within a specified data look back period*
 - ✓ Medicare/Medicaid dual eligible beneficiaries may also be included based if Medicare reimbursed for the DME/healthcare service
 - Note: Approximately 27% of the emPOWER Medicare population is dual eligible



This HHS emPOWER Program data **NOT**...

- ≠ Beneficiaries living in long-term care facilities or skilled nursing facilities
- ≠ Individuals enrolled in other insurance programs:
 - Private insurance plans
 - Military insurance plans (e.g., TRICARE)
 - Only State Medicaid or State Children's Health Insurance Programs (CHIP) (non-dual eligible)
 - Note State/Territories can volunteer to participate in the "emPOWERing State/Territorial Medicaid/CHIP Data Pilot"

HHS emPOWER Program: emPOWERing Communities, Saving Lives

The [HHS emPOWER Program](#), a partnership between ASPR and the Centers for Medicare and Medicaid Services (CMS), provides dynamic data, GIS, and AI tools, training, informational resources, and technical assistance to help federal-to-community partners protect the health of at-risk Medicare beneficiaries who live independently, including 4.4 million who rely on essential health care services and/or electricity-dependent durable medical and assistive equipment and devices.

HHS emPOWER Map, REST Service, and emPOWER AI

Public



HHS emPOWER Emergency Planning De-identified Dataset

Restricted

Services	Services	All Power Outage
# Incident Severity (1 month)	# All-Incident severity (1 month)	# Electricity-dependent services (1 month)
11	11	44
30	30	12
55	55	15
11	11	44
30	30	12
55	55	15

HHS emPOWER Emergency Response Outreach Individual Dataset

Secure, Restricted

Individual Level Dataset - All Service Subgroups	Individual Level Dataset - All Service Subgroups
Name	Other Information
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

HHS emPOWER Program Platform

Training, Informational Resources, and Toolkits



Technical Assistance
Regional, Federal, SLTT,
and Community Partners



Partners

Public Health Authorities

Health Care

Emergency Management

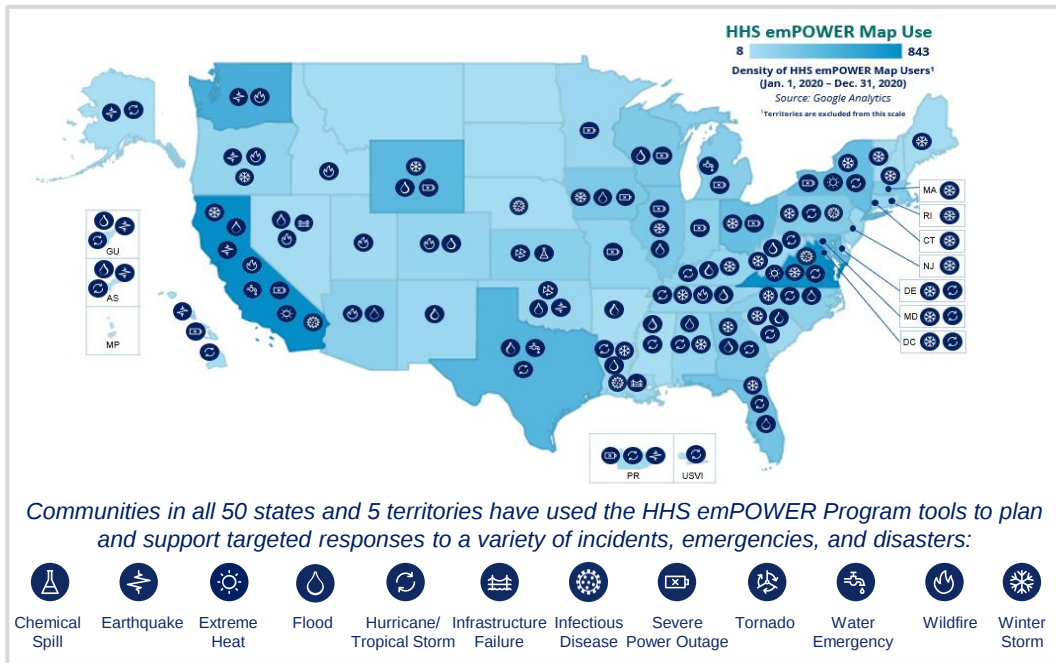
First Responders

Department of Defense

Public Utilities, Transportation

Human Services

Volunteer & Community Organizations



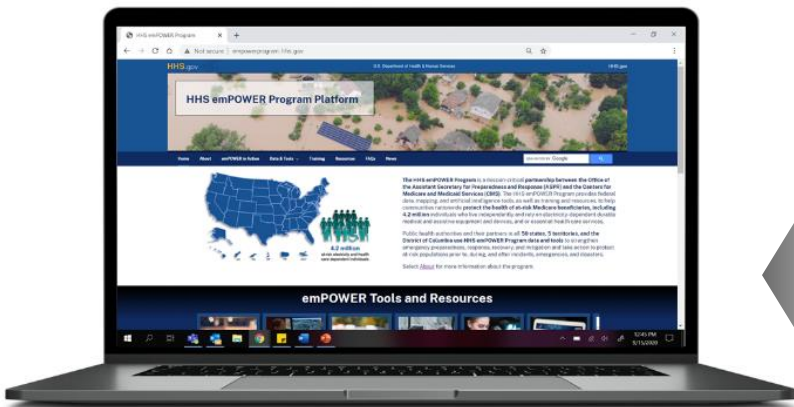
Communities in all 50 states and 5 territories have used the HHS emPOWER Program tools to plan and support targeted responses to a variety of incidents, emergencies, and disasters:



¹ Territories are excluded from this scale.

HHS emPOWER Program Platform

The HHS emPOWER Program (emPOWER) has officially launched the [HHS emPOWER Program Platform](#), a new mobile-ready technical assistance platform that provides public health, health care, and emergency management organizations, first responders, power companies, and many other partners with emPOWER data, tools, training, and informational resources to help them anticipate, plan for, and respond to incidents, emergencies, and disasters in their communities.



Use your smartphone camera to scan this QR code and access the HHS emPOWER Program Platform



The Platform features multiple pages, including:

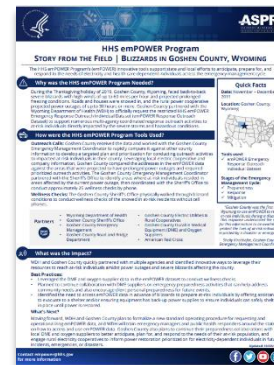
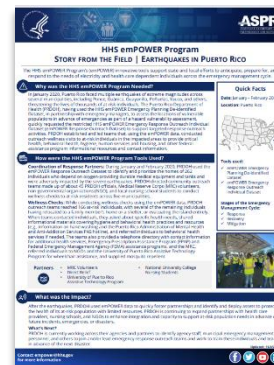
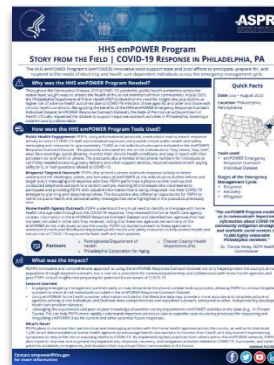
- **About:** Learn about the history and impact of emPOWER;
- **Resources:** Find new fact sheets, job aids, quick reference resources, and more tools that have been and will continue to be developed with partners' unique needs in mind;
- **FAQs:** Find answers to common questions about the program and its suite of data and mapping tools;
- **News:** Keep up to date on the latest information from emPOWER and its partners working to protect the health and safety of at-risk individuals with access and functional needs;
- **And more!**

emPOWER in Action

On the [emPOWER in Action](#) page, partners can discover how rural-to-urban communities across the nation have used emPOWER tools to enhance their health care situational awareness, coordinate planning activities across community partners, and innovatively conduct life-saving outreach activities.



Partners can hover over or select pins on the emPOWER in Action Map to learn more.



Partners can also read more by downloading full Stories from the Field below the map.

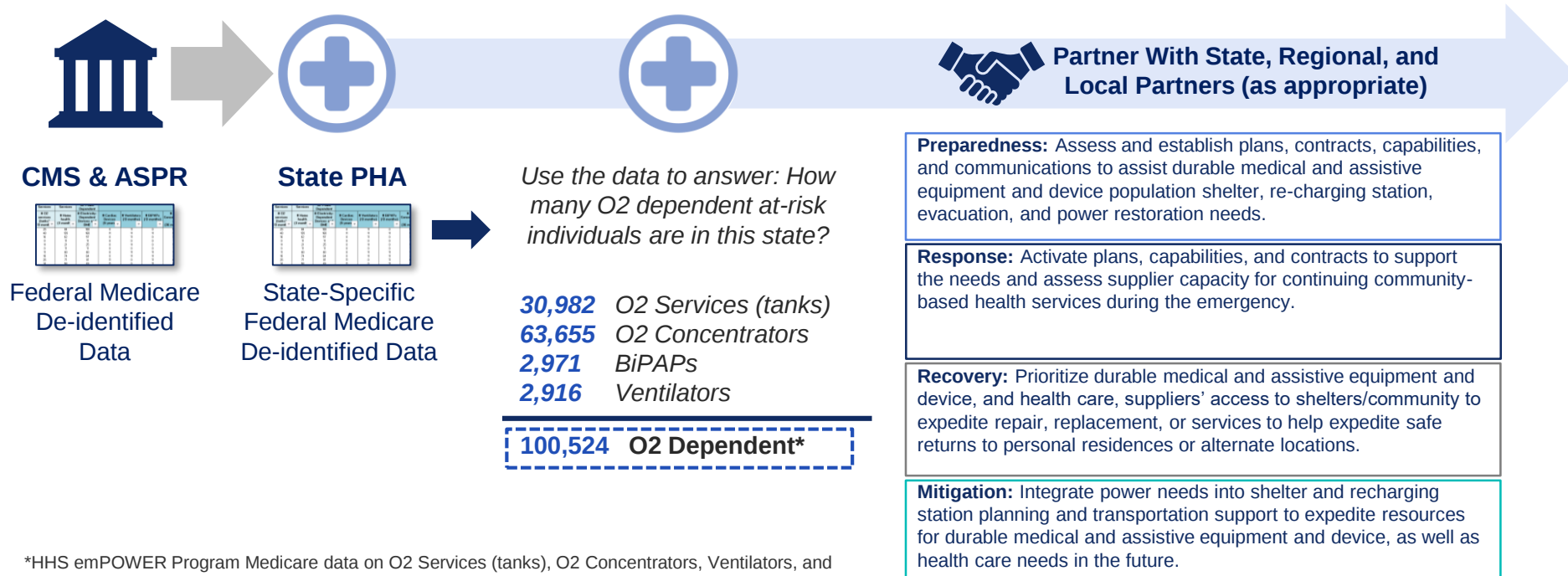
We want to hear from you!

Tell us how you used emPOWER data and tools using our [Submit a Story Template](#) here:



Integrating Federal De-identified Medicare Data

De-identified emPOWER data can be used to **understand the needs of specific at-risk populations**, including oxygen-dependent, and implement targeted public health activities across the emergency management cycle.



*HHS emPOWER Program Medicare data on O2 Services (tanks), O2 Concentrators, Ventilators, and BiPAPs, Illinois, January 2019

Use Case: Severe Wildfires in Los Angeles, CA

HHS emPOWER Program tools helped Los Angeles (LA) **identify the needs of its at-risk populations and connect with health care partners** to improve continuity of care.

Preparedness

In December 2017, LA County Department of Public Health (DPH) requested emPOWER data on behalf of the City of LA to support first responder efforts to identify and locate at-risk individuals in areas that had been evacuated due to the historic wildfires

Response & Recovery

LA County DPH also identified and engaged durable medical and assistive equipment and device, as well as oxygen, suppliers in the area that serve approximately 600 at-risk individuals. This effort helped inform and ensure continuity of care for many wildfire evacuees

Impact

The City of LA is incorporating emPOWER data into emergency response protocols and plans. LA County and City are developing mapping applications for the data to provide first responders with current, actionable information to support the at-risk population in their community



~600 at-risk individuals impacted by wildfires

38 Durable medical and assistive equipment and device providers contacted, and 22 surveyed



Supporting partners:

- LA Emergency Management Department
- LA Fire Department

- LA Police Department
- Durable Medical and Assistive Equipment and Device, and Oxygen, Suppliers

Use Case: COVID-19 Response in Philadelphia, PA

In July 2020, the Philadelphia Department of Public Health (PDPH) partnered with the Pennsylvania Department of Health to officially request a secure disclosure of emPOWER data to support **targeted outreach to older adults at higher risk of adverse health outcomes from COVID-19 infection** and home health agencies caring for these at-risk patients in the community.

Response

- To reduce the risk of public health staff COVID-19 exposure, PDPH conducted a targeted public health messaging postcard campaign to **13,000 emPOWER at-risk individuals** and conducted **80 outreach phone calls** to gather information on individual-level needs.
- PDPH also used emPOWER data to identify and contact **two home health agencies** not originally on PDPH's contact list. They then distributed valuable information to home health agencies to share with staff and their patients. PDPH also plans to distribute **1,200 smart thermometers** to encourage home health care staff to monitor their health and stay home if experiencing symptoms to reduce the risk of exposing clients to COVID-19.



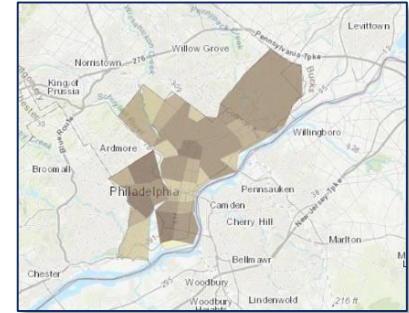
Supporting Partners:

- Philadelphia Corporation for Aging
- Pennsylvania Department of Health
- Chester County Health Department (PA)

Impact

Using emPOWER data, PDPH:

- Provided at-risk individuals with **essential public health and safety messages** and access to direct contacts for support services (e.g., grocery delivery).
- Identified and partnered with home health agencies to **increase health care staff and patient safety** with targeted information and resources.
- Gathered insights from members of the at-risk community that can help PDPH improve public health messaging and **enhance their COVID-19 emergency planning and response activities.**



~13,000 At-risk individuals reached with targeted messages

80 Individuals contacted to identify needs and assess behavior changes

1,200 Smart thermometers distributed to monitor health care staff symptoms

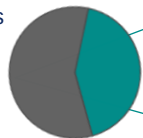
emPOWERing State/Territory Medicaid and CHIP Data Pilot

The emPOWERing State Medicaid and CHIP Data Pilot

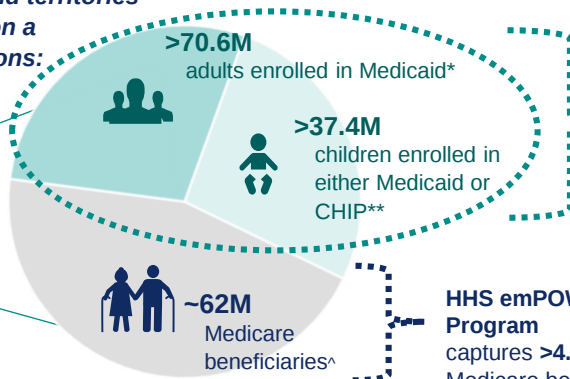
ASPR, in partnership with CMS, provides states and territories with guidance, technical assistance, and tools to generate emPOWER datasets from their state or territory-operated Medicaid and CHIP data, giving states a more complete picture of their at-risk populations

Using the emPOWER guidance, states and territories can generate data and capture insights on a significant share of their at-risk populations:

>330M
in the United States



~170M Medicare, Medicaid, and CHIP beneficiaries



emPOWERing State Medicaid/CHIP Data Pilot

will capture at-risk children and adults out of the >108M enrolled in a State Medicaid or CHIP Program

HHS emPOWER Program captures >4.4M at-risk Medicare beneficiaries

Pilot Supporting Activities



Intra-State Partnership Development



Stakeholder Training



Technical Assistance and Innovation Support



Communications Materials Development



Data Sharing

Pilot Partners and Phases

Key State/Territory Partners

Medicaid IT/
Enterprise
Coordinator



Public Health
Preparedness
Director

Pilot Phases

- 1 State/Territory Develops Partnership
- 2 Federal Partners Provide Technical Assistance
- 3 State/Territory Implements Framework and Generates Datasets
- 4 State/Territory Operationalizes Datasets

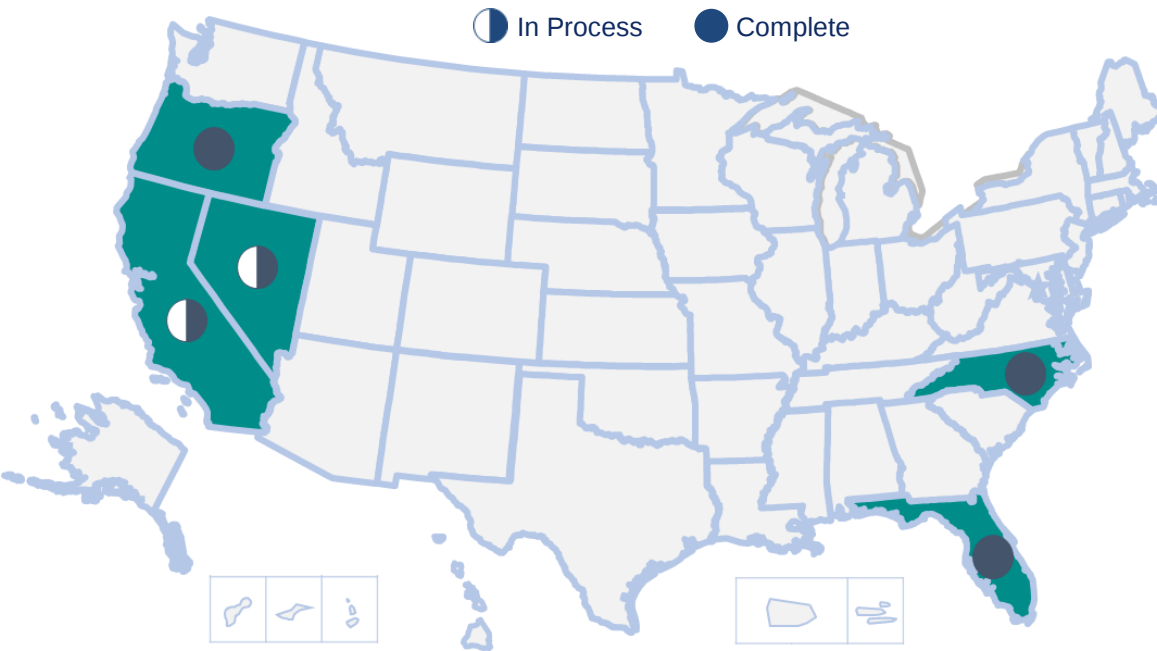
* As of September 2020, Medicaid: some low-income people (i.e., families and children, pregnant women, elderly) and people with disabilities.

** As of September 2020, CHIP provides health coverage to eligible children, through Medicaid and separate CHIP programs.

^ Medicare beneficiaries (Parts A, B, and C): age 65+, regardless of income, medical history, or health status, and people <65 years old with permanent disabilities.

The emPOWERing State Medicaid and CHIP Data Pilot in Action

State partners across the country have completed the pilot, are in process or completing the pilot, and are considering participation in the pilot



Sample Uses for the Medicaid/CHIP emPOWER Data:

- Developing integrated emergency plans, systems, processes, and triggers
- Anticipating potential **health care system surge** by at-risk populations (e.g., pediatric, adult, older adult) and **allocate resources** to mitigate system stress
- Identifying **optimal locations, staffing, resources, and power** needs for shelters supporting pediatric, adults and older adult populations with access and functional needs
- Assessing **accessible transportation needs** and evacuation routes
- Informing power restoration prioritization decisions
- Informing and supporting potential **emergency outreach and life-saving assistance**

HHS emPOWER Program – NEW COVID-19 At-Risk De-identified Data and Tools

emPOWER COVID-19 At-Risk Medicare Data and Tools

The HHS emPOWER Program leverages an **evidence-based COVID-19 risk model*** to assess risk for **62 million Medicare beneficiaries** based on their unique health profiles and by geography and has translated this **new emPOWER COVID-19 At-Risk Medicare population** into a suite of dynamic datasets and tools to inform and support federal, state, territorial, county, and MMA public health authorities' (PHA) mission critical public health activities.



Protect Health and Advance Health Equity



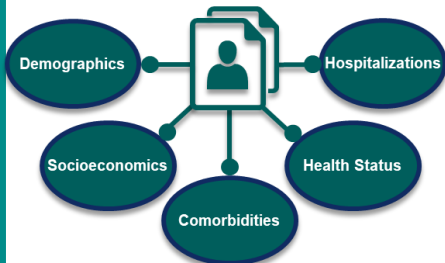
Support Vaccine and Therapeutic Planning



Help Mitigate Health Care System Surge

Risk Model

Identifies individual risk for all 62 million Medicare beneficiaries



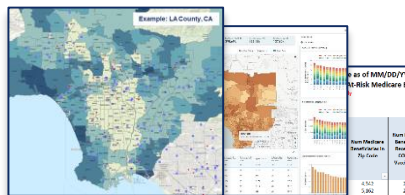
Health Care Service Dependent (3)
and
Community-Based Highest to Lowest**



emPOWER COVID-19 At-Risk Medicare Data and Tools

Restricted: emPOWER COVID-19 At-Risk Emergency Planning De-identified REST Service, Dashboard, and Datasets

Provides de-identified at-risk population data including demographic, risk, health care service dependence, and vaccine uptake at the state, county, and ZIP Code levels



Restricted/Secure: emPOWER COVID-19 At-Risk Response Outreach Individual Datasets

Provides limited individual data for selected risk strata and geographic areas for HHS approved targeted response outreach public health activities

HHS emPOWER Program - COVID-19 At-Risk - Update as of MM/DD/YYYY

INDIVIDUAL LEVEL DATASET - COVID-19 At Risk Medicare Beneficiaries

WARNING: Individual population is restricted to select limited strata and geographic areas only. No individual data may be used for commercial purposes.

NOTE: All data are de-identified and used for non-commercial purposes only.

BETA

Order	First Name	Last Name	Employment/Type	Dual Eligibility Status	Date of Birth
1	Ann	Smith	60	No	November 4, 1914
2	Ann	Brown	65	No	February 13, 1910
3	John	Robert	65	No	October 26, 1890
4	John	Doe	10	No	March 14, 1910
5	Buckley	Walker	15	No	May 22, 1910
6	John	Johnson	15	No	September 24, 1910

*Requires State/Territorial PHA Official Disclosure Request & HHS approval

Restricted: Just-in-Time Training, Informational Resources, Technical Assistance, and Stakeholder Engagement

Provides training, informational resources, and technical assistance to support adoption and integration, and stakeholder engagement activities for best practices



*Natural history of COVID-19: Risk factors for hospitalizations and deaths among >26 million U.S. Medicare beneficiaries. *The Journal of Infectious Diseases*, 2020; jiaa767, <https://doi.org/10.1093/infdis/jiaa767>

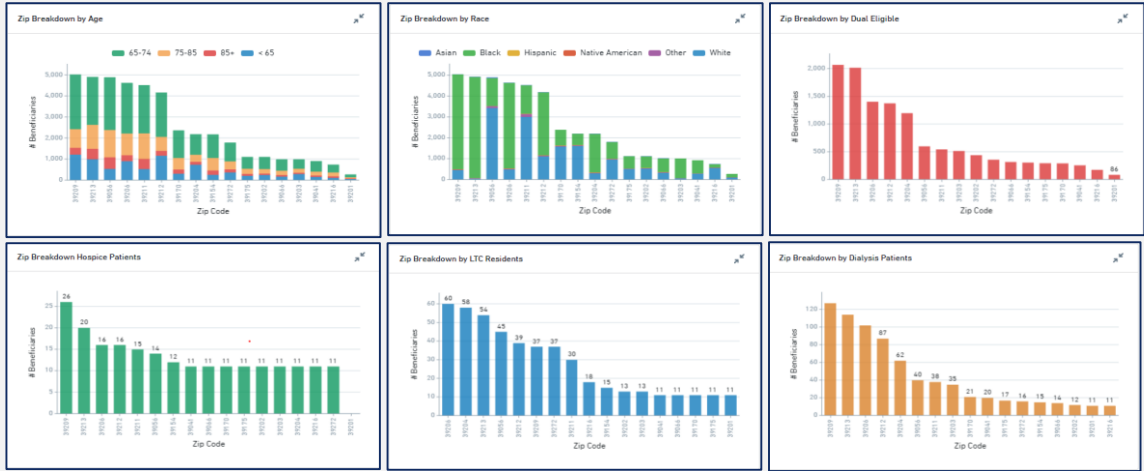
**Long-term care, dialysis, and hospice.

emPOWER COVID-19 At-Risk Dashboard - Overview

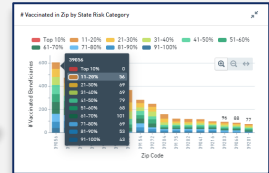
The emPOWER COVID-19 At-Risk Dashboard in HHS Protect* provides readily meaningful data visualizations of all the de-identified data at the state, territory, county, and ZIP Code level to help support response and mitigation activities.

Provides **dynamic charts** displaying distribution of beneficiaries by **demographics (e.g., age, race, etc.)** and **dual eligibility status**.

Charts are available to show risk stratification, demographic, dual eligibility, DME and health service. Additional sub-category breakdown charts for home health, DME dependency are forthcoming.



Charts include number of Medicare beneficiaries that have been administered a vaccine by **only a healthcare provider who has submitted a claim** is available by state, county and ZIP Code level. Additional charts are forthcoming.



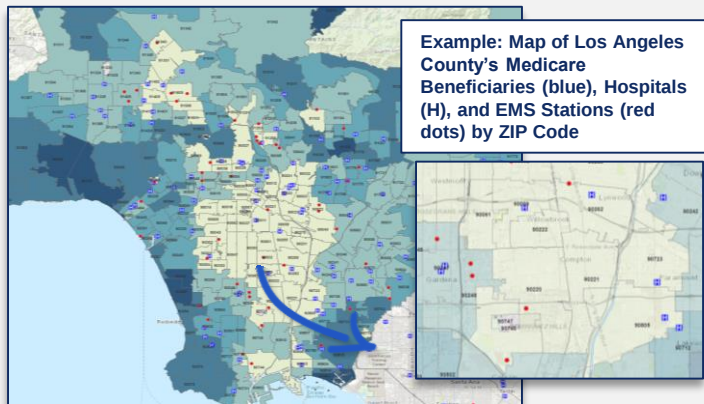
emPOWER COVID-19 At-Risk REST Service and emPOWER COVID-19 At-Risk Emergency Planning De-identified Dataset

The [HHS emPOWER Program](#) translates Medicare data into a suite of tools, that can be utilized for local outbreak data, health care facilities, targeted vaccination planning.

emPOWER COVID-19 At-Risk Representational State Transfer (REST) Service

Restricted

Provides de-identified at-risk population data including demographic, risk, health care service dependence, and vaccine uptake at the state, county, and ZIP Code levels



emPOWER COVID-19 At-Risk Emergency Planning De-identified Dataset

Restricted

Provides de-identified at-risk population data including demographic, risk, health care service dependence and vaccine data at the state, county, and ZIP Code levels

HHS emPOWER Program - COVID-19 At-Risk - Update as of MM/DD/YYYY - BETA
De-identified Aggregated U.S. County - COVID-19 At-Risk Medicare Beneficiaries
Please note that all data is fictitious and meant for illustrative purposes only

County FIPS Code	County	State FIPS Code	State	Num Zip Codes in County (Assigned)	Num Medicare Beneficiaries in County	Num Medicare Beneficiaries Received 1st COVID-19 Vaccine Dose	Num Medicare Beneficiaries Completed COVID-19 Vaccination	Pct Chg in Medicare Beneficiaries Completed COVID-19 Vaccination Since Last Tracking Report	Pct Chg in Medicare Beneficiaries Completed COVID-19 Vaccination Since First Tracking Report	Num Dual-Eligible Medicare Beneficiaries	Num Age Under 65	Num Age 65-74
111	County1	71	AA	5	440	199	153	27%	146%	57	69	227
222	CountyA	71	AA	12	837	402	271	12%	442%	104	121	444
222	CountyA	71	AA	12	1,824	997	731	62%	532%	88	418	497
222	CountyA	71	AA	12	4,783	3,387	1,634	39%	314%	74	999	1,209

Menu | Data Overview | Parent-Child Zip Code Mapping | State Actual Data | County De-identified Data | Zip Code De-identified Data

HHS emPOWER Program – COVID-19 At-Risk Individual Tool

emPOWER COVID-19 At-Risk Response Outreach Individual Dataset

State, territorial, and MMA PHAs that meet certain HIPAA criteria may officially submit an official disclosure request for HHS senior leadership approval for targeted PHA response outreach public health activities.

emPOWER COVID-19 At-Risk Response Outreach Individual Dataset – Individual Level (BETA) (Secure/Restricted)

PHAs can use this dataset to support HHS-approved targeted response outreach and community mitigation public health activities to protect the health of high-risk Medicare beneficiaries.

Name, Demographic & Other Information, and Address

HHS emPOWER Program - COVID-19 At-Risk - Update as of MM/DD/YYYY

INDIVIDUAL LEVEL DATASET - COVID-19 At-Risk Medicare Beneficiaries

POPULATION - Medicare population is restricted to alive beneficiaries as of Month YYYY who are
NA indicates that the at-risk population is not included in this request.

NOTE: All data are fictitious and used for illustrative purposes only

Name					
Initial Sorting Order	First Name	Last Name	Enrollment/Plan Type	Dual Eligibility Status	Date
1	Anne	Smith	FFS	Yes	November
2	Amy	Brown	MA	No	February
3	John	Taylor	MA	No	December
4	Jane	Doe	FFS	Yes	March 4
5	Robert	Walker	FFS	Yes	May 20
6	Mary	Johnson	FFS	No	September

COVID-19 At-Risk – Health Care Service-Dependent Medicare Beneficiaries

COVID-19 At-Risk - Healthcare Service Dependent Medicare Beneficiaries

Nursing Home/SNF Resident	In-Facility Dialysis	At-Home Dialysis	At-Home Health
In the past 6 months	In the past 3 months	In the past 3 months	In the past 3 months
No	No		
No	Yes		
No	No		
Yes	No		
No	No		
No	No		
No	No		
No	No		

COVID-19 At-Risk Stratifications for Community Based Medicare Beneficiaries

COVID-19 At-Risk Stratifications for Community-Based Medicare Beneficiaries									
Top 1-10 Percent (Highest Risk Stratification) of State	11-20 Percent (Second Highest Risk Stratification)	21-30 Percent (Third Highest Risk Stratification)	31-40 Percent (Fourth Highest Risk Stratification)	41-50 Percent (Fifth Highest Risk Stratification)	51-60 Percent (Sixth Highest Risk Stratification)	61-70 Percent (Seventh Highest Risk Stratification)	71-80 Percent (Eighth Highest Risk Stratification)	81-90 Percent (Ninth Highest Risk Stratification)	91-100 Percent (Lowest Risk Stratification)
No	No	Yes	No	No	No	No	No	No	No
Yes	No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	Yes	No	No
No	No	No	No	No	No	No	No	No	Yes
No	No	No	No	Yes	No	No	No	No	No
No	Yes	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	Yes	No	No
No	No	No	No	No	Yes	No	No	No	No
No	No	No	No	No	No	No	No	Yes	No

emPOWER COVID-19 At-Risk Response Outreach Individual Dataset

State, territorial, and MMA PHAs that meet certain HIPAA criteria may officially submit an official disclosure request for HHS senior leadership approval for targeted PHA response outreach public health activities.

emPOWER COVID-19 At-Risk Response Outreach Individual Dataset – Individual Level (BETA) (Secure/Restricted)

PHAs can use this dataset to support HHS-approved targeted response outreach and community mitigation public health activities to protect the health of high-risk Medicare beneficiaries.

Other emPOWER Program Medicare Beneficiary Power Dependent DME and Home Health Service Indicators

Other emPOWER Program Medicare Beneficiary Power Dependent DME and Home Health Service Indicators									
Home Health Services	Oxygen Services (Tanks)	Cardiac Devices	Ventilators	BiPAPs	Oxygen Concentrators	Enteral Feeding	IV Infusion Pumps	Suction Pumps	Motorized Wheelchair Scooter
In the past 3 months	In the past 13 months	In the past 5 years	In the past 13 months	In the past 13 months	In the past 36 months	In the past 13 months	In the past 13 months	In the past 13 months	In the past 13 months
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Yes	No	No	No	No	Yes	No	No	No	No
Yes	Yes	Yes	No	No	Yes	No	No	No	No
No	No	No	No	No	No	No	No	No	No

Other emPOWER Program Medicare Beneficiary Power Dependent DME, Home Health, Service Providers

Home Health Agency				
Name	Address	Zip Code	Phone Number	NPI or Other Facility Identifier
☐	☐	☐	☐	☐
View Home Health	384 Park Street	33333	(333) 383-1932	
Home Care Services	3929 1st Ave	44444	(399) 311-3913	

COVID-19 At-Risk - Healthcare Service Providers

Nursing Home or Skilled Nursing Facility

Name	Address	Zip Code	Phone Number	NPI or Other Facility Identifier
☐	☐	☐	☐	☐
Nursing Home Manor	3 Third St	33333	(999) 999-9999	

Other Medical Providers for Community-Based Beneficiaries

Other Medical Providers for Community-Based Beneficiaries									
Most Recent Primary Care Physician (PCP)					Most Recent Influenza Vaccine Provider				
Name	Address	Zip Code	Phone Number	NPI or Other Provider Identifier	Name	Address	Zip Code	Phone Number	NPI or Other Provider Identifier
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Dr. John Doe	555 Birch St	12345	(123) 555-5566		Rite Aid Pharmacy	2001 Walker Rd	11122	(858) 333-2210	
Dr Donald Meyer	123 Main St	12345	(585) 858-5858		CVS Pharmacy	10770 Monroe St	14350	(311) 698-3413	

Questions?

HHS emPOWER Program Contact Information

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Email: empower@hhs.gov

HHS emPOWER Program Platform: <https://empowerprogram.hhs.gov>