



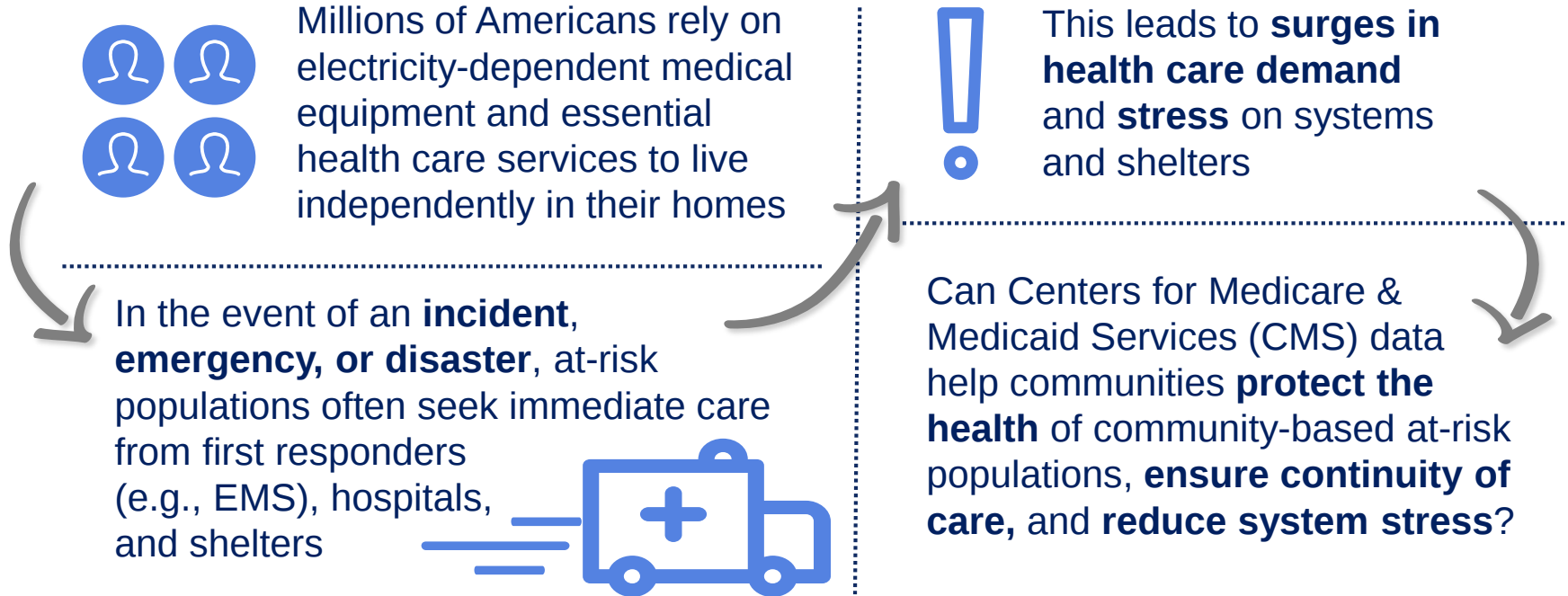
**ASPR**

# **HHS emPOWER PROGRAM OVERVIEW**

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

**2019**

# Why was the HHS emPOWER Program created?



# Evidence for the HHS emPOWER Program

## The Pilot

ASPR partnered with CMS and the City of New Orleans Health Department to **assess whether Medicare claims data was timely enough to rapidly identify and locate at-risk individuals** who relied on electricity-dependent oxygen equipment.



*Medicare beneficiaries in the City of New Orleans with a claim for ventilator, oxygen concentrator, and/or oxygen tank.*

## The Results

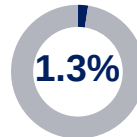
- **611 Medicare beneficiaries** had a claim for an oxygen concentrator or ventilator, and 191 were visited
- Claims data were **93% accurate** in identifying the medical equipment\*

Only 15 people



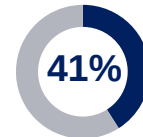
were enrolled in the city's special needs registry

Only 8 people



were enrolled in the electric company's registry

Almost half



did not have an emergency plan

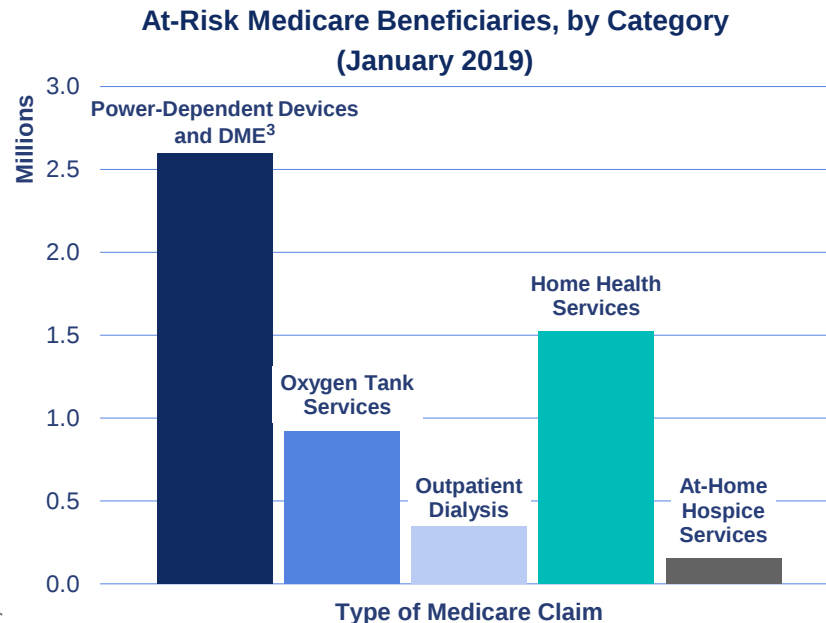
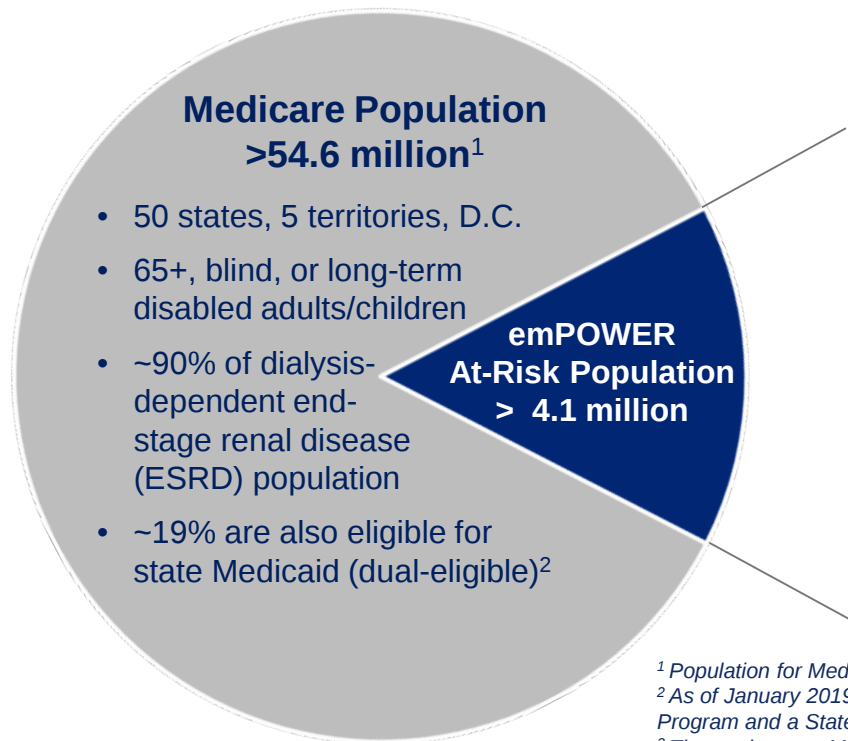
Over half



would need assistance in an emergency

\*Similar results were observed in an exercise in Broome County, New York

# Characteristics of the HHS emPOWER Population



<sup>1</sup> Population for Medicare (Parts A and B) and Medicare Advantage (Part C) as of January 2019.

<sup>2</sup> As of January 2019, 28.6% of the emPOWER population is dual-eligible (beneficiary is enrolled in both a Medicare Program and a State operated Medicaid Program) as compared to 18.6% of the total Medicare population.

<sup>3</sup> The total counts Medicare beneficiaries only once, even if they have more than one piece of electricity-dependent DME.

# The HHS emPOWER Program

## emPOWERing Communities, Saving Lives

The HHS emPOWER Program, a partnership between ASPR and the Centers for Medicare and Medicaid Services, provides dynamic data and mapping tools to help communities **protect the health of more than 4.1 million** Medicare beneficiaries who live independently and rely on electricity-dependent medical equipment and health care services

### HHS emPOWER Map and REST Service Public



Public

### HHS emPOWER Emergency Planning De-identified Dataset

| Services                | Services                   | AB Power Dependent                      | # of |
|-------------------------|----------------------------|-----------------------------------------|------|
| # Home health (1 month) | # At Home Energy (1 month) | # Electricity Dependent Devices and CME | # of |
| 11                      | 11                         | 44                                      | 11   |
| 39                      | 39                         | 13                                      | 39   |
| 59                      | 59                         | 13                                      | 59   |
| 11                      | 11                         | 44                                      | 11   |
| 39                      | 39                         | 13                                      | 39   |
| 44                      | 44                         | 13                                      | 44   |

Restricted

### HHS emPOWER Emergency Response Outreach Individual Dataset

**INDIVIDUAL LEVEL DATASET - All At-Risk Individuals**  
 Population: Medicare beneficiaries who are identified as at-risk beneficiaries as of November 2018. This dataset includes information on the individual's location, date of birth, and other demographic information. It is not intended for public release.

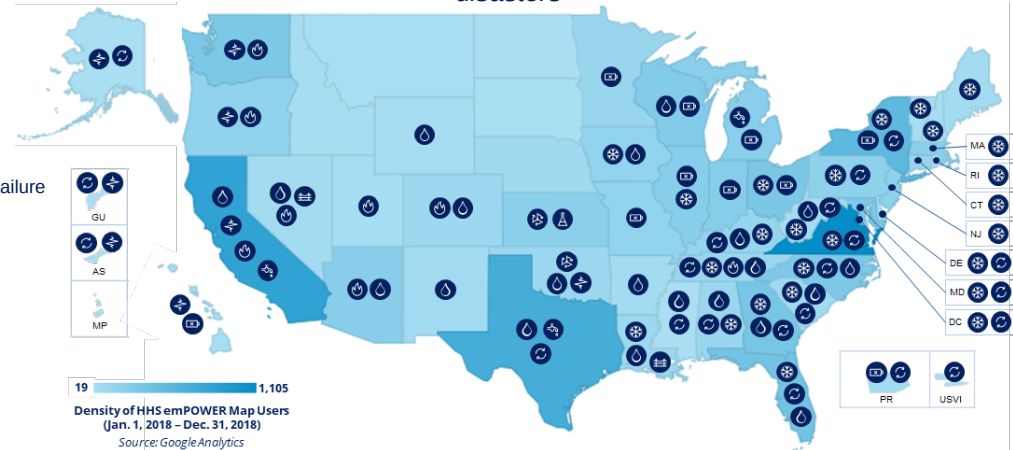
**Source: HHS emPOWER Program Data**

| State | First Name | Last Name | Date of Birth | Healthcare Plan No. | ZIP Code |
|-------|------------|-----------|---------------|---------------------|----------|
| 1     | John       | Smith     | 1945-01-01    | 123456              | 10001    |
| 2     | Jane       | Johnson   | 1950-02-15    | 789012              | 90210    |
| 3     | Robert     | Williams  | 1955-03-20    | 345678              | 60601    |
| 4     | Emily      | Brown     | 1960-04-10    | 901234              | 30301    |
| 5     | Michael    | Miller    | 1965-05-25    | 567890              | 40201    |
| 6     | Sarah      | Wilson    | 1970-06-18    | 234567              | 20001    |
| 7     | David      | Moore     | 1975-07-05    | 890123              | 10001    |
| 8     | Lisa       | Taylor    | 1980-08-12    | 456789              | 90001    |
| 9     | James      | Anderson  | 1985-09-01    | 123456              | 80001    |
| 10    | Michelle   | Clark     | 1990-10-15    | 789012              | 70001    |

Secure, Restricted

Communities in all 50 states and 5 territories have used the HHS emPOWER Program prior to, during, and after the following incidents, emergencies, and disasters

- Chemical Spill
- Earthquake
- Flood
- Hurricane/Tropical Storm
- Infrastructure Failure
- Severe Power Outage
- Tornado
- Water Emergency
- Wildfire
- Winter Storm

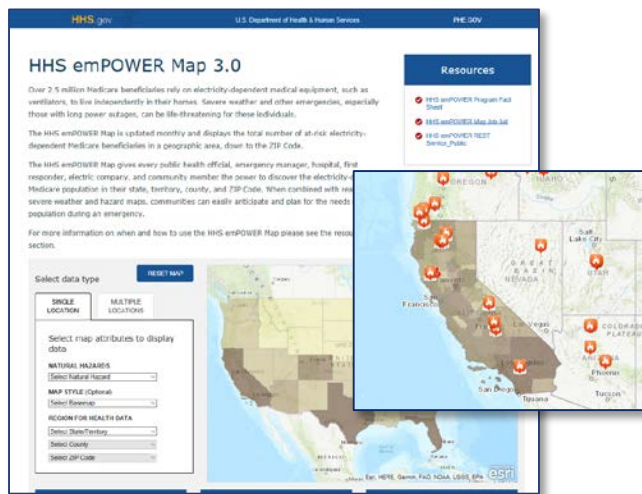


# HHS emPOWER Map and REST Service

# HHS emPOWER Map and REST Service

ASPR is helping communities by providing de-identified Medicare at-risk population data on the public, interactive HHS emPOWER Map, and through an emPOWER REST Service via ASPR's GeoHEALTH Platform

The [HHS emPOWER Map](#) displays the total number of at-risk electricity-dependent Medicare beneficiaries in a geographic area, down to the ZIP Code



The [HHS emPOWER Representational State Transfer \(REST\) Service Public](#) allows users to consume the same map data layer in their own geographic information system (GIS) application



# HHS emPOWER Map Medical Equipment and Device Information

The emPOWER Map and REST Service provide **monthly de-identified totals of Medicare claims** submitted for reimbursement for the following electricity-dependent durable medical equipment (DME) and devices



Four Cardiac Devices\*



Ventilator



Bi-level Positive Airway Pressure Device (BiPAP)



Oxygen Concentrator



Enteral Feeding Machine



Intravenous (IV) Infusion Pump



Suction Pump



End-Stage Renal Disease (ESRD)  
At-Home Dialysis



Motorized Wheelchair or Scooter



Electric Bed

\*Cardiac devices include left, right, and bi-ventricular assistive devices (LVAD, RVAD, BIVAD) and total artificial hearts (TAH)

# Sample Uses of the HHS emPOWER Map and REST Service

These publicly available tools allow community stakeholders to better anticipate and plan for the needs of the electricity-dependent population in a geographic area prior to, during, and after an emergency



Gain population-based situational awareness



Identify health care resource needs and potential areas of surge



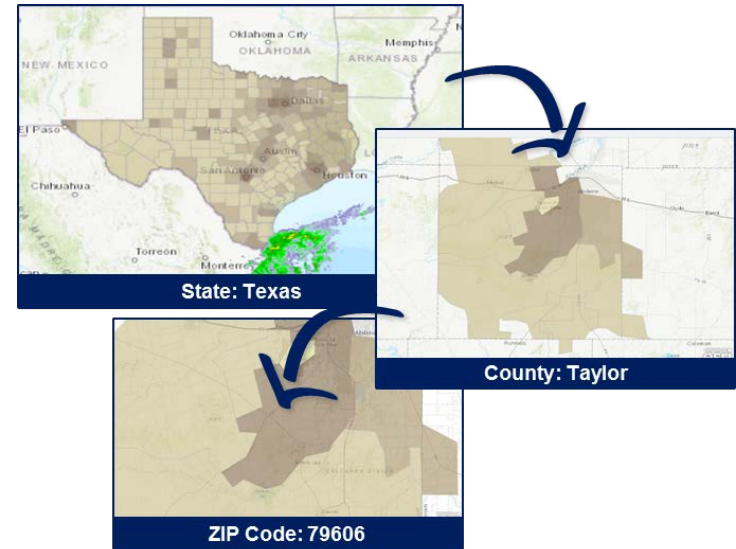
Determine potential shelter locations and resource needs



Inform public communications and foster community engagement



Plan for evacuations and identify evacuation routes



# **HHS emPOWER Emergency Planning De-identified Dataset**

# The emPOWER Emergency Planning Dataset

The HHS emPOWER Emergency Planning De-identified Dataset provides public health authorities with the monthly total number of **Medicare claims by type of electricity-dependent medical equipment AND health care service in a geographic area, down to the ZIP Code**

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Wrap Text

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Cell Styles

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Format

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AutoSum

Sort & Filter

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Review

General

Formulas

References

Cells

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Tools

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*Provided monthly to state, territory and certain major metropolitan area public health authorities*

# Information in the emPOWER Emergency Planning Dataset

The emPOWER Emergency Planning Dataset provides public health authorities more detailed de-identified data, including Medicare claims data totals for each of the electricity-dependent DME and devices and the following health care services:



## Outpatient Facility Dialysis

Outpatient dialysis services for patients with End-Stage Renal Disease (ESRD)



## Home Health Care Services

Home health services including skilled nursing care and physical therapy, etc.



## Oxygen Tank Services

Oxygen tank service delivery for patients with qualifying conditions



## Home Hospice Care Services

Hospice services provided in a personal residence to a terminally ill individual

# Sample Uses of the emPOWER Data

The emPOWER de-identified data can help inform and support decision making by public health authorities and their partners, as they deem appropriate, prior to, during, and after an emergency



Anticipate potential health system surge and leverage resources to mitigate stress



Identify optimal locations, staffing, resources, and power needs for shelters



Develop emergency plans, systems, processes, and triggers



Assess accessible transportation needs and evacuation routes



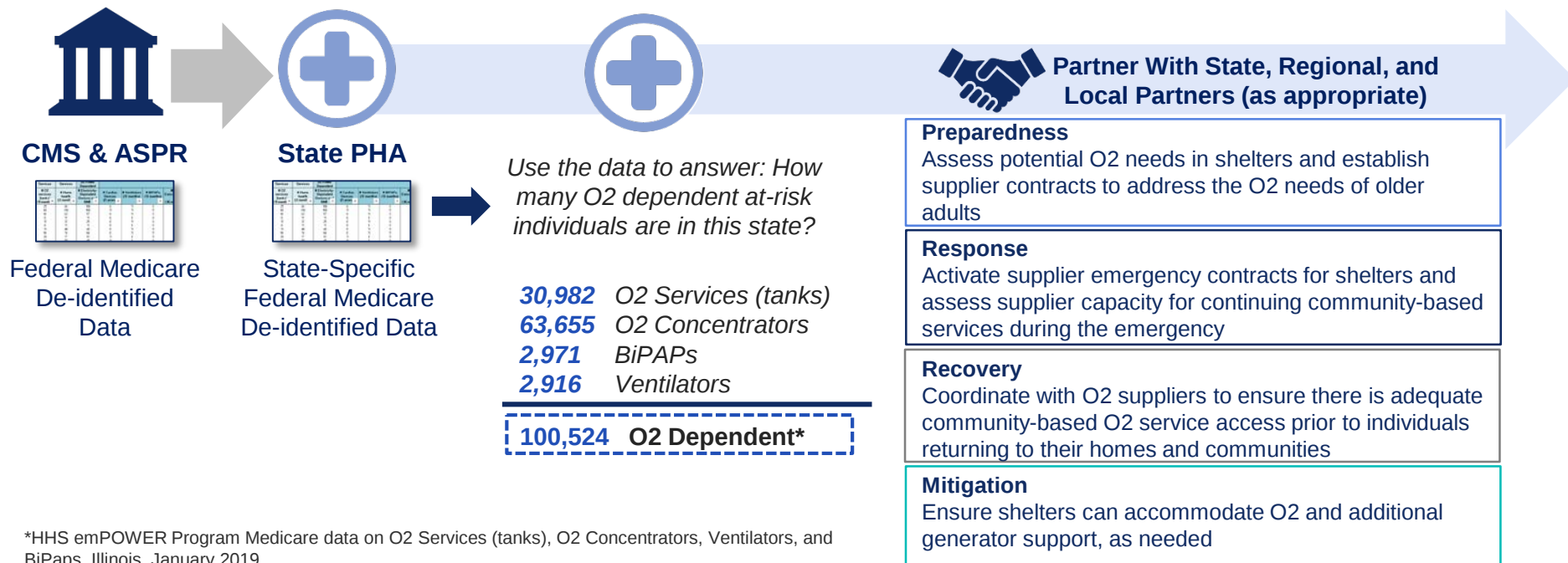
Identify and address potential gaps in emergency resources



Inform power restoration prioritization decisions

# 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

# **HHS emPOWER Emergency Response Outreach Individual Dataset**

# The emPOWER Emergency Response Outreach Dataset

The emPOWER Emergency Response Outreach Individual Dataset is a tool that can provide public health authorities with limited individual information to inform and support life-saving outreach public health activities in the event of an emergency

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**Official disclosures are restricted to only public health authorities that meet certain criteria**

# Information in the emPOWER Emergency Response Outreach Dataset

The emPOWER Emergency Response Outreach Dataset provides the same data that is found in the de-identified tools, but **at the individual level**. The information in this dataset includes:



Limited Identifiable Data



Health Care Service Type



Medicare Plan



DME and Cardiac Device Type



Dual Eligibility Status<sup>^</sup>



DME & Oxygen Supplier, Health Care  
Provider Contact Information

<sup>^</sup>Whether the Medicare beneficiary is also eligible and enrolled in a State Medicaid or CHIP Program

# Sample Uses of the emPOWER Emergency Response Outreach Dataset

Upon approval from HHS, an authorized public health authority and PHA-approved partners may use the emPOWER Emergency Response Outreach Dataset to support efforts **to identify and provide life-saving and maintaining response outreach** to individuals in the event of an incident, emergency, or disaster



Activate emergency plans, map the data, and assess resources



Identify and provide critical resources and power in shelters



Assess accessible transportation needs and develop evacuation plans



Activate communications networks to alert and inform individuals of resources



Identify and deploy emergency response assets

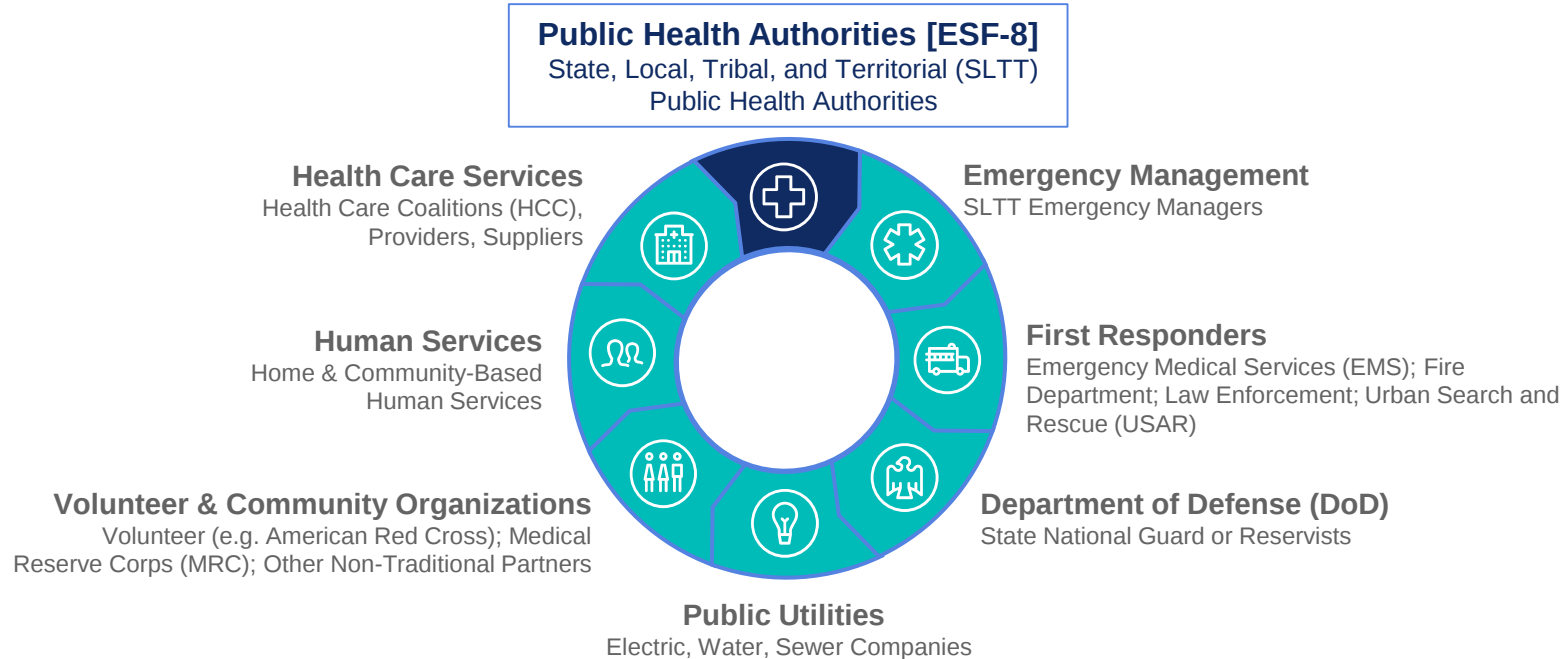


Inform power restoration prioritization decisions

# The HHS emPOWER Program in Practice

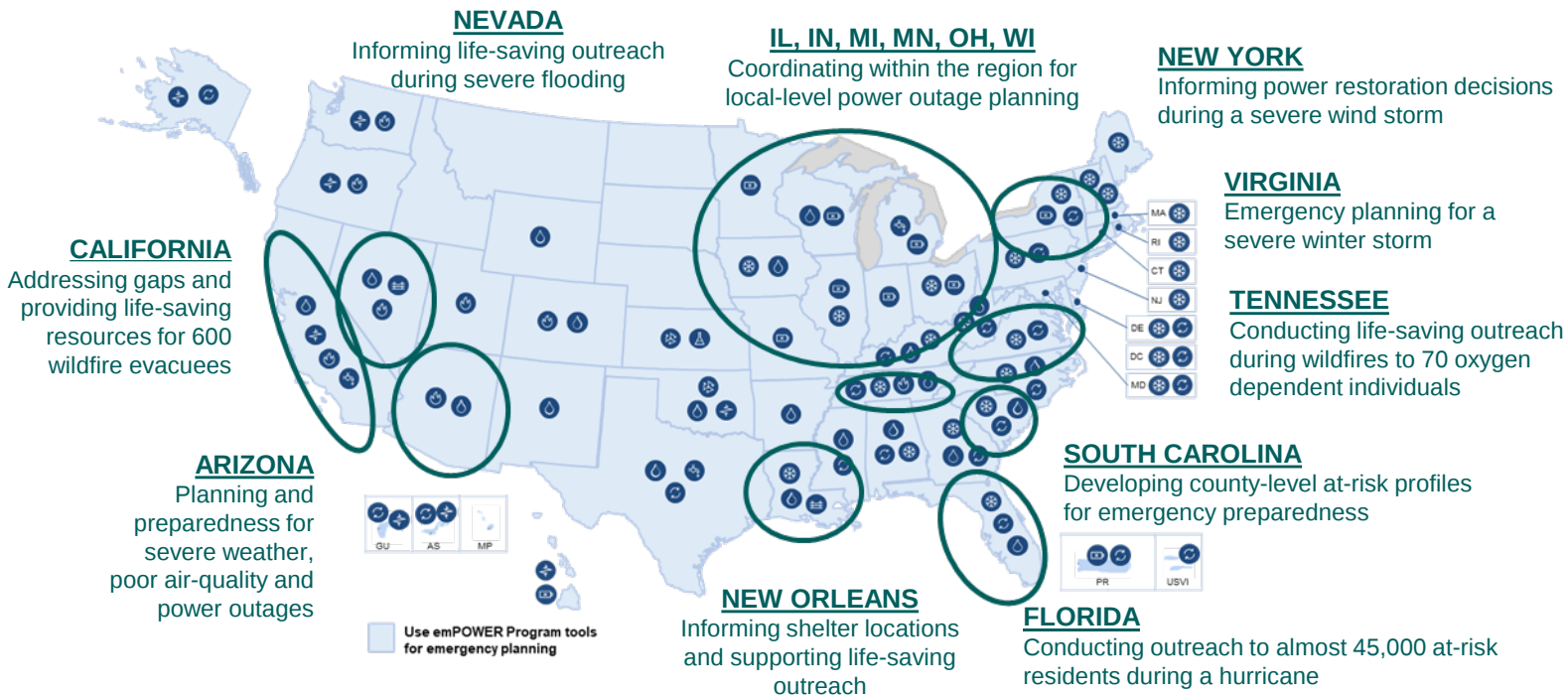
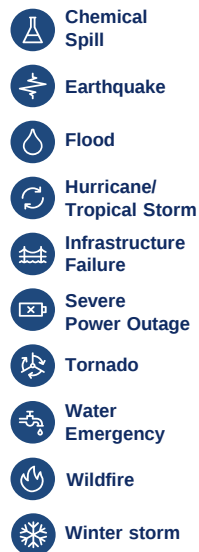
# emPOWER Informs Community Partnerships

The HHS emPOWER Program helps public health authorities engage a variety of national, state, local, and community partners throughout the emergency management cycle



# HHS emPOWER Program in Action

Since 2013, communities in all 50 states and 5 territories have used the HHS emPOWER Program prior to, during, and after the following emergencies, and will continue to request and use emPOWER data in the coming years



# Use Case: Severe Flooding in Nevada

In HHS emPOWER Program tools helped Carson City Health and Human Services (CCHHS) and Washoe County Health District (WCHD) assess its capacity to assist at-risk populations and engage partners to ensure coordinated outreach

## Preparedness

In 2017, CCHHS used both emPOWER datasets to **identify and address gaps in resources** (e.g., oxygen tanks) for the at-risk population in the event of required evacuations

## Outreach

CCHHS and WCHD used the emPOWER Emergency Response Outreach Dataset to **identify at-risk individuals living in flood-prone, avalanche-prone, and remote areas**, and coordinated with partners to conduct outreach

## Impact

CCHHS is expanding use of the emergency planning dataset to help **set up mass care operations and inform umbrella contracts** with DME companies. WCHD and Washoe County GIS developed an effective way to operationalize emPOWER data within 30 minutes



**4** counties in Nevada benefitted from emPOWER Program data

**300** homes in flood-prone areas contacted by CCHHS



### Supporting partners:

- NV Division of Public and Behavioral Health
- NV Aging and Disability Services
- NV Division of Emergency Management
- NV National Guard
- Tribe Emergency Manager

# Use Case: Hurricane Matthew in Florida

The HHS emPOWER Program helped Florida quickly identify and provide outreach to tens of thousands of at-risk individuals, setting the stage for life-saving emergency response

## Preparedness

In anticipation of Hurricane Matthew, the Florida Department of Health used the emPOWER Emergency Response Outreach Dataset to identify at-risk individuals in seven counties and performed a **reverse lookup of phone numbers**



### Supporting partners:

- Florida Division of Emergency Management and Emergency Operations Centers

## Response

A life safety call was made to **almost 45,000 residents** by the Florida Division of Emergency Management using the Statewide Alerting and Notification System

## Impact

Staff **contacted the 169 individuals** who indicated they might have a health need during and shortly after the hurricane



**44,500** at-risk residents identified and called

**17,000** residents responded to calls

**169** individuals requested assistance

# Use Case: Severe Wildfires in Los Angeles, California

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 equipment (DME) and 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** DME providers contacted, and 22 surveyed



### Supporting partners:

- LA Emergency Management Department
- LA Fire Department
- LA Police Department
- DME and Oxygen Suppliers

# Use Case: Severe Power Outage in Broome County, NY

The HHS emPOWER Program informed Broome County's power restoration decisions and provided vital information to coordinate public health emergency response activities

## Preparedness

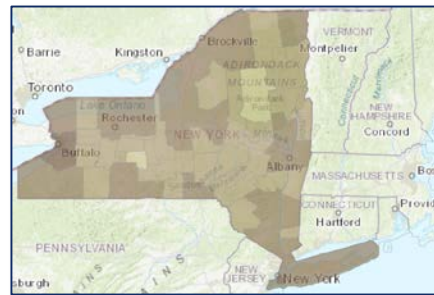
The Broome County Health Department regularly leverages the **HHS emPOWER Map and Emergency Planning Dataset** for emergency planning and preparedness

## Response

In 2017, Broome County used the emPOWER Emergency Response Outreach Dataset to **identify at-risk residents in areas with prolonged power outages** following a severe weather and wind storm

## Impact

The emPOWER dataset **enabled quick identification of at-risk residents** so local sheriff patrols could conduct timely individual outreach to electricity-dependent at-risk individuals that may have been adversely impacted by prolonged power outages



**58** at-risk residents were quickly identified out of

**~9,000** total residents who may have lost power



### Supporting partners:

- Broome County Office of Emergency Services
- Broome County Sheriff's Office

# Use Case: Hurricane Irma in US Virgin Islands

HHS emPOWER Program tools helped the US Virgin Islands identify and locate individuals dependent on dialysis for life-saving outreach and evacuation

## Preparedness

In 2017, ASPR, CMS, and territorial public health officials used both datasets to **to identify health care and resource gaps for dialysis patients and develop a plan** with End-Stage Renal Networks and dialysis providers to ensure continuity of their life-maintaining health care services

## Response

Following Hurricanes Irma and Maria, ASPR used the emPOWER Emergency Response Outreach Dataset and CMS-3178-F reporting requirements to **rapidly identify, locate, and conduct life-saving evacuations** of dialysis patients via ASPR NDMS, USPHS, USAR, FEMA and DOD

## Impact

ASPR is developing best practices to assist others in understanding how emPOWER data and the CMS 3178-F reporting requirements<sup>1</sup> can help to inform and protect the lives of at-risk individuals in disasters



# 235

life-saving  
evacuations from  
St. Thomas and  
St. Croix



### Supporting partners:

- ASPR
- CMS
- Dialysis providers
- End-Stage Renal Networks
- FEMA
- DOD
- US Public Health Service (USPHS)
- Urban Search and Rescue (USAR)

<sup>1</sup>A means, in the event of an evacuation, to release patient information as permitted under [45 CFR 164.510\(b\)\(1\)\(ii\)](#).

# **Advancing the Program through Innovative Technology**

# emPOWER Strategy: Translation, Innovation & Expansion

emPOWER Map  
and REST Service



emPOWER  
Medicare Datasets

| Services                             | All Power<br>Dependent                        |                                    |
|--------------------------------------|-----------------------------------------------|------------------------------------|
| # At Home<br>residents<br>(3 months) | # Eligibility<br>Dependent (months<br>and DME | # Cardiac<br>Services<br>(5 years) |
| 13                                   | 44                                            | 55                                 |
| 50                                   | 13                                            | 11                                 |
| 50                                   | 13                                            | 11                                 |
| 11                                   | 44                                            | 55                                 |

**INDIVIDUAL LEVEL DATASET - All At-Risk Individuals**  
 INDICATOR: All at-risk individuals in the study were included in the dataset. No indicators that list the all at-risk population is not included in this report.  
 Note: All data are Services are used for descriptive purposes only.

| Name            | Other Information |
|-----------------|-------------------|
| John Doe        | 1234567890        |
| Jane Smith      | 9876543210        |
| Bob Johnson     | 5678901234        |
| Alice Brown     | 2345678901        |
| Charlie White   | 8901234567        |
| Diana Green     | 4567890123        |
| Frank Black     | 1234567890        |
| Grace King      | 9876543210        |
| Henry Lee       | 5678901234        |
| Ivy Scott       | 2345678901        |
| Jack Hall       | 8901234567        |
| Karen Young     | 4567890123        |
| Leo Adams       | 1234567890        |
| Mia Baker       | 9876543210        |
| Noah Clark      | 5678901234        |
| Olivia Evans    | 2345678901        |
| Peter Foster    | 8901234567        |
| Quinn Gibson    | 4567890123        |
| Rachel Harris   | 1234567890        |
| Samuel King     | 9876543210        |
| Tina Lewis      | 5678901234        |
| Victor Miller   | 2345678901        |
| Wendy Nelson    | 8901234567        |
| Xavier Phillips | 4567890123        |
| Yara Quinn      | 1234567890        |
| Zoe Reed        | 9876543210        |

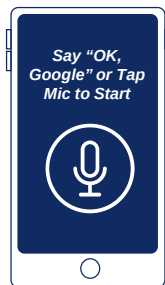
Fact Sheets, Job Aids,  
Stories from the Field



emPOWER Portal



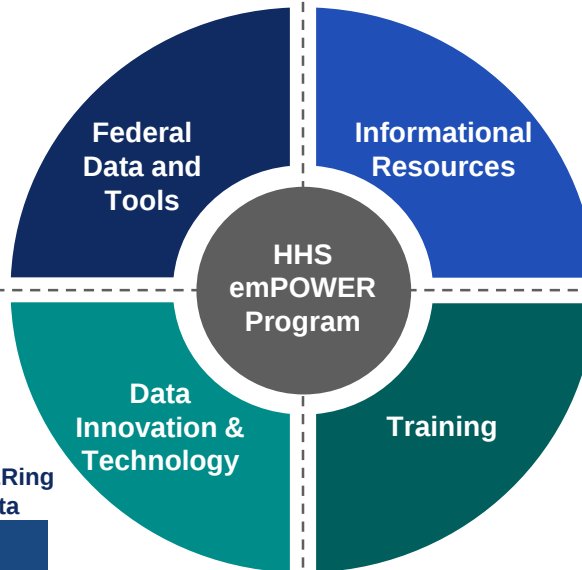
emPOWER  
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emPOWERing  
State Medicaid/  
CHIP Data Pilot



emPOWERing  
VA Data



HHS emPOWER Program  
Web-Based Training



# **Additional Resources and Information**

# HHS emPOWER Program Resources

## Training

- [HHS emPOWER Program Web-based Training Program \(ID #1083714\)](#) is a free, publicly accessible course designed to help partners better understand the HHS emPOWER Program\* and integrate its tools into their emergency preparedness, response, recovery, and mitigation activities. The course is divided into five modules, which provide: an introduction to the HHS emPOWER Program, a detailed overview of each of the mapping and dataset tools, practical application examples and case studies of how public health authorities and their partners have used the program tools in real world emergencies.

## Informational Resources

- [HHS emPOWER Program Executive Summary](#)
- [HHS emPOWER Program Fact Sheet](#)
- [HHS emPOWER Map Job Aid](#)
- [HHS emPOWER REST Service Public Job Aid](#)
- [HHS emPOWER REST Service Public Link](#)
  - The REST Service allows users to consume the HHS emPOWER Map data layer in their own geographic information system (GIS) applications to help them better integrate and use this with other community data to inform and support public health activities across the emergency management cycle.

# HHS emPOWER Program

## *Contact Information*

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