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HHS emPOWER REST Service_Public: Overview for GIS Professionals

The HHS emPOWER Representational State Transfer (REST) Service_Public allows users to readily access, consume, and apply map data layers in their own geographic information systems (GIS) to support national, state, territory, local, and community-based GIS analyses. The REST Service data layers are updated monthly. They contain the total number of the Centers for Medicare and Medicaid Services (CMS) Medicare Fee-For-Service (Parts A/B) and Medicare Advantage (Part C) Program beneficiaries who have had an administrative claim for one or more of life-maintaining or saving **electricity-dependent durable medical** and **assistive equipment (DME) and devices,** and **at-risk combinations** for those that also rely on certain health care service(s) and any electricity-dependent DME and devices. This data is also accessible on the HHS emPOWER Map, which does not require GIS capabilities.

Why use the HHS emPOWER REST Service?

Millions of Medicare beneficiaries rely on electricity-dependent DME and devices to live independently in their homes. Incidents that cause prolonged power outages, such as severe weather or disasters, can be life-threatening to these individuals.

Many of these individuals may rapidly seek assistance from emergency medical services (EMS) or overwhelm hospitals or shelters when seeking access to care or secure power. Others may shelter in place as they are unable to evacuate safely without assistance, putting their lives at risk.
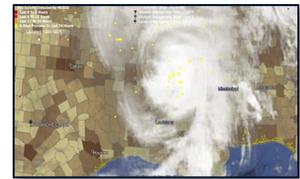

Hurricane Laura over Texas and Louisiana (August 2020)

How to apply the HHS emPOWER REST Service_Public?

GIS users can use the HHS emPOWER REST Service data layer to map the number of electricity-dependent individuals or one of the other at-risk combinations in an area to compare it with hospital and shelter locations, evacuation routes, and more. This information can be used by public health, health care coalitions, emergency management, first responders, utilities, and many other community partners to inform emergency preparedness, mitigation, response, and recovery activities. The HHS emPOWER REST Service allow users to gain deeper insights across the emergency management cycle, such as to:

- Identify **optimal locations, staffing, resources, and power needs** for shelters based on the number of at-risk Medicare beneficiaries in a given area.

- Anticipate potential **health care and EMS surge** based on the density of at-risk beneficiaries and location of health care facilities.

- **Plan for evacuation needs** and identifying evacuation routes.

- Support **power restoration decision-making**...and more!
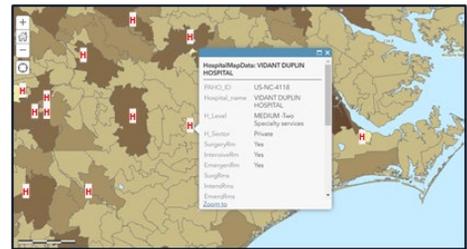
An emPOWER data layer overlaid with hospital locations in North Carolina

Who can access the HHS emPOWER REST Service?

The HHS emPOWER REST Service is publicly available, and GIS users can apply the HHS emPOWER REST Service in their own GIS applications and systems to help their at-risk populations and communities more rapidly recover following an incident, emergency, or disaster.

Consuming the HHS emPOWER REST Service in a user's own system enables them to conduct, inform, and support national, state, territorial, local, and community-based GIS analyses.

emPOWER county-level data layer overlaid with thermal hotspots and fire activity in CA

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HHS EMPOWER REST SERVICE_PUBLIC: APPLY, VIEW, AND CONSUME THE MAP DATA LAYERS

4. How to Access the HHS emPOWER REST Service _Public?

Option 1: Visit HHS emPOWER REST Service Webpage

Step 1: Go to HHS emPOWER Program Platform

Step 2: Visit the HHS emPOWER REST Service_Public webpage

Step 3: Select the button labeled "Select here to launch the HHS emPOWER REST Service" on the right-hand side of the webpage. This will take you to the ArcGIS REST Service_Public Directory.

Option 2: Go directly to the ArcGIS REST Service_Public Directory

GIS programmers may prefer to visit the HHS emPOWER REST Service Public webpage directly and scroll down to the "Layers" section. GIS programmers may also access the webpage by scanning the QR code to the right.

Scan this QR Code!

5. View and Consume the HHS emPOWER REST Service_Public

The HHS emPOWER REST Service_Public provides a description of the data layer, the purpose of the data, multiple options with which to view the data layer, and links to view ZIP Code, county, and state level data.

To view and interact with the data layer covering the entire United States, select any of the options next to "**View In**"

Each link under the **Layers** section will take the user to a page specifically for ZIP Code, County, or State/Territory-level datasets. Each of these pages provides additional information on each data layer

This REST Service is **available to all partners** and is intended to inform and support emergency preparedness, mitigation, response, and recovery activities in all communities.

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HHS emPOWER REST Service: At-Risk Data Layers Information and Guide

The HHS emPOWER REST Service_Public provides national, state, territory, county, and ZIP Code level data, including de-identified totals by **electricity-dependent DME and devices** and **at-risk combinations**, as described below. More detailed information on each data type is available in the Quick Data Reference Guide.

To conduct a more comprehensive analysis, overlay data layers from other Federal REST Services on top of HHS emPOWER REST Service_Public data layers. For information on these data layers see page 3 of the emPOWER Map Job Aid.
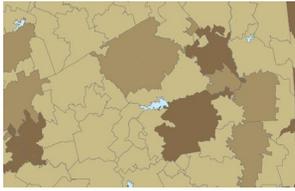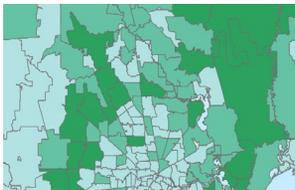
Electricity-Dependent DME and Devices
Individuals who have an administrative claim for one or more of the fourteen types of the following devices: cardiac devices, oxygen concentrator, suction pump, bi-level positive airway pressure device (BiPAP), ventilator, electric bed, intravenous (IV) infusion pump, enteral feeding tube, motorized wheelchair or scooter.

In-Facility End-Stage Renal Disease (ESRD) Dialysis and Any DME and Devices
Individuals receiving in-facility ESRD Dialysis treatment services and use one or more types of electricity-dependent DME and devices.

Oxygen Tank Services and Any DME and Devices
Individuals with qualifying conditions who receive home oxygen tank service delivery and use one or more types of electricity-dependent any DME and devices.
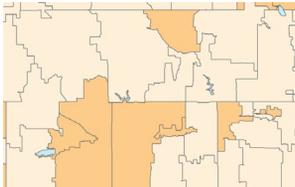
Home Health Care Services and Any DME and Devices
Individuals who receive home health care services and use one or more electricity-dependent DME and devices.

At-Home Hospice Care Services and Any DME and Devices
Individuals who use at-home hospice care and use one or more electricity-dependent DME and devices.

Any Health Care Service and Any DME and Devices
Individuals receiving any health care service and use one or more electricity-dependent DME and devices.

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HHS EMPOWER REST SERVICE_PUBLIC EXAMPLE ONE: ELECTRICITY-DEPENDENT DME

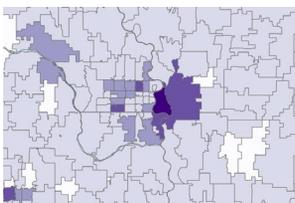Use the HHS emPOWER REST Service's de-identified data to understand, anticipate, and respond to the needs of electricity-dependent populations and implement targeted activities across the emergency management cycle.

Partner with State, Regional, and Local Partners (as appropriate)

CMS & ASPR

State, territory, county, and ZIP Code specific de-identified data on the HHS emPOWER REST Service

Public Health Authorities & Emergency Managers

Federal Medicare De-identified
HHS emPOWER REST Service_Public

Preparedness: Assess and establish plans, contracts, capabilities, and communications for electricity-dependent DME needs in shelters, charging stations, and pre-event power restoration planning.

Mitigation: Integrate power needs into shelters; develop potential recharging stations; and potentially expedite other resources and transportation to support continuity of electricity-dependent DME and other health care services in future emergencies.

Response: Activate plans, capabilities, and contracts to support population needs; assess supplier capacity for continuity of care of electricity-dependent DME and community-based health care services; and inform power restoration prioritization during the emergency.

Recovery: Prioritize electricity-dependent DME and health care suppliers' access to shelters and/or community for DME service (e.g., supplies, repair, replacement services) to expedite care and safe return to home or other location.

Exercise: Access and Add Data Layers

Example Scenario: Santa Clara County, California, is facing severe wildfires from two adjacent counties and has planned emergency public safety power shutoffs to reduce further risk. The county public health and emergency management officials are developing evacuation and sheltering plans to protect at-risk populations and reduce stress on the 9-1-1 dispatchers, EMS, and hospitals helping those acutely injured by the fire. Follow the steps below to inform emergency planning and response activities using the HHS emPOWER REST Service_Public.

Step 1: Access the REST Service by selecting one of the GIS format links provided on the HHS emPOWER REST Service_Public webpage and consume the REST Service data layers in your GIS application of choice.

Step 2: Review the data layer displayed and familiarize yourself with the Electricity Dependent DME legend. Use the legend to identify which ZIP Codes have the highest number of electricity-dependent Medicare beneficiaries in Santa Clara County.

Step 3: Next, add a data layer with wildfire events using the GeoHEALTH USA Wildfire Activity REST Service or other REST Service used by your state. Note fire locations throughout the U.S. and zoom in on northern California to view wildfires.

Step 4: If available, add additional data layers for the areas of planned power outages, EMS and hospital locations, and roadway status to the map.

Step 5: When viewing this map, identify the following:

✓ The safest evacuation routes and potential assets for assistance;

✓ Optimal locations for shelters and baseline estimates of DME power needs;

✓ ZIP Codes for prioritizing response assets, deployment and staging areas to reduce surge and stress on EMS and hospitals; and

✓ Areas that should be prioritized for power restoration once the wildfires have subsided.

HHS emPOWER REST Service_Public webpage

An emPOWER data layer overlaid with wildfire locations in northern California

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