MEDICAL ENERGY RISK PROFILE

New Orleans

WHEN HEALTH DEPENDS ON ENERGY POWER OUTAGES AND HIGH ENERGY COSTS ARE PUBLIC HEALTH.



Galvanista

Energy Resilience for Health

contact@galvanista.com | Galvanista.com

Health and Energy

Electricity supports health in ways that are often most visible when access is disrupted. It powers medical equipment, enables treatment at home, supports mobility and other functional needs, and helps maintain conditions necessary for ongoing care. For people whose health or daily functioning depends on these services, access to electricity is not only a household utility issue. It can directly affect continuity of care.

Medical energy security describes the condition in which people can reliably and affordably access the electricity needed to support medically important health, treatment, and functional needs.

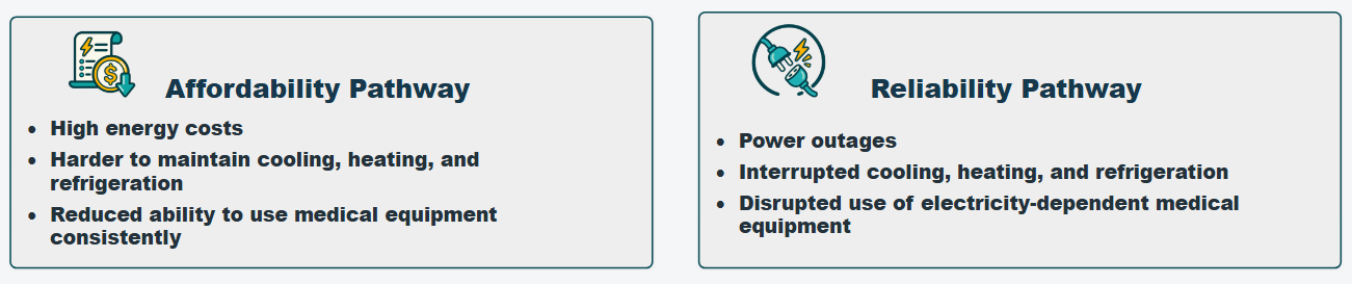
Electricity Medically Dependent Patients

Electricity medically dependent patients rely on electricity to maintain equipment, treatment, or functional needs that are important to their health or care. Examples include:

- **Respiratory support:** oxygen concentrators, ventilators, and other powered respiratory equipment
- **Home treatment:** infusion equipment, feeding equipment, and home dialysis
- **Mobility and functional support:** powered wheelchairs, scooters, electric beds, and other assistive equipment
- **Other medically important electricity-supported needs:** equipment or services necessary to maintain health, treatment, or daily functioning

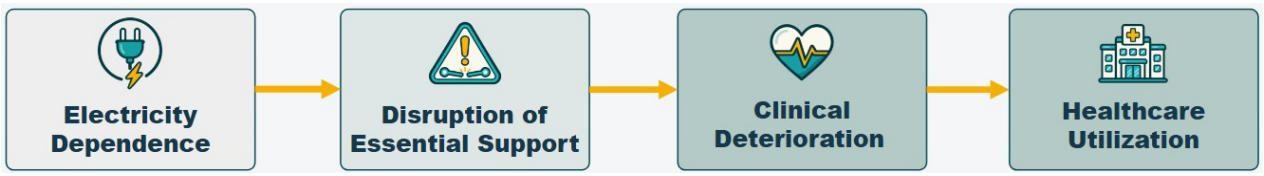
For electricity medically dependent patients, medical energy risk emerges when reliable or affordable access to electricity is compromised.

Two Pathways to Medical Energy Risk



Although the pathways differ, both can reduce or interrupt access to electricity needed for a medically important function. That disruption can then create clinical or functional consequences and, in some cases, healthcare utilization.

How Energy Disruption Can Affect Health and Healthcare



Medical energy risk depends on what electricity is supporting, how long that support is disrupted, and what backup or alternatives are available.

Medical Energy Risk Across Energy and Healthcare

Medical energy risk exists at the intersection of the energy system and the healthcare system. When electricity becomes unaffordable or is disrupted, people who rely on electricity for medical equipment, treatment, or functional needs face greater risk of adverse health outcomes and higher healthcare utilization. Reducing this risk requires coordination across both sectors, including programs, data, and resources that address energy affordability and reliability while also supporting healthcare access, patient identification, and care delivery.

Sector Impacts

The same underlying medical energy risk creates different consequences for each sector. Energy organizations experience these risks through affordability, reliability, customer-service, and regulatory responsibilities, while healthcare organizations experience them through patient health, continuity of care, utilization, and healthcare spending.

⚡ Energy Sector

• Energy burden, arrears, and disconnection risk.

Higher electricity costs can increase unpaid balances and disconnection risk.

• Reliability, outage exposure, and restoration.

For electricity-dependent customers, outage frequency, duration, restoration time, and continuity planning become more consequential.

• Customer protections, program demand, and regulatory exposure.

Greater affordability and reliability needs can increase demand for assistance programs, customer protections, planning, and accountability.

Healthcare Sector

• Utilization, acuity, and acute-care exposure.

Energy disruption can interfere with medically important support and increase the need for emergency or hospital care.

• Claims, payer exposure, and healthcare spending.

Additional care can increase claims, payer spending, and total cost of care.

• Population risk, care management, and continuity of care.

Providers and health plans may need to identify higher-risk patients, support continuity of care, and incorporate energy vulnerability into care management.

Current Programs and Resources

Energy and healthcare organizations already use programs and tools that address parts of medical energy risk. These resources were generally created for different institutional purposes, however, and no single program addresses the full connection between energy conditions, medical vulnerability, and coordinated intervention.

The examples below show what each resource contributes and where important limitations remain.

Affordability Pathway

• DOE LEAD Tool

The U.S. Department of Energy's Low-Income Energy Affordability Data (LEAD) Tool provides energy-burden information for affordability analysis, geographic targeting, and program planning.

\+ Maps energy burden to guide affordability planning and program targeting

\- Does not intervene at the patient level

• HHS LIHEAP

The Low Income Home Energy Assistance Program (LIHEAP), administered through the U.S. Department of Health and Human Services, helps eligible households meet home energy costs.

\+ Provides low-income energy bill assistance for heating and cooling

\- Does not address outage vulnerability

Reliability Pathway

• Utility customer protections

Utilities use disconnection policies, service protections, outage procedures, medical or vulnerable-customer provisions, and related mechanisms to help manage continuity and customer risk.

\+ Provide limited outage and bill protections

\- Programs vary by utility and market, and are not designed to target health risk or measure clinical impact

• HHS emPOWER Tool

The U.S. Department of Health and Human Services' emPOWER Program identifies geographic concentrations of electricity-dependent Medicare beneficiaries to support emergency preparedness and response.

\+ Medicare-based geographic mapping of electricity-dependent beneficiaries for emergency planning and response.

\- Does not provide direct energy or financial support

Where the Coordination Gap Remains

Both sectors are already responding to the affordability and reliability pathways, but for different institutional reasons and through separate programs. Energy organizations are trying to maintain affordable, reliable service and manage customer and regulatory obligations. Healthcare organizations are trying to protect health, maintain continuity of care, manage population risk, and control healthcare utilization and spending.

The interventions may be similar even when the reasons for using them are different. Energy organizations are not healthcare organizations, and medical risk can extend beyond powered devices to medication storage, mobility, treatment continuity, and exposure to extreme heat or cold. Healthcare knowledge is needed to interpret those risks, while energy expertise is needed to act on the underlying electricity conditions.

What Closing the Gap Requires

- **Shared targeting and information:** Bring relevant health, energy, and program information into the same decision process so populations and conditions of greatest concern can be identified.

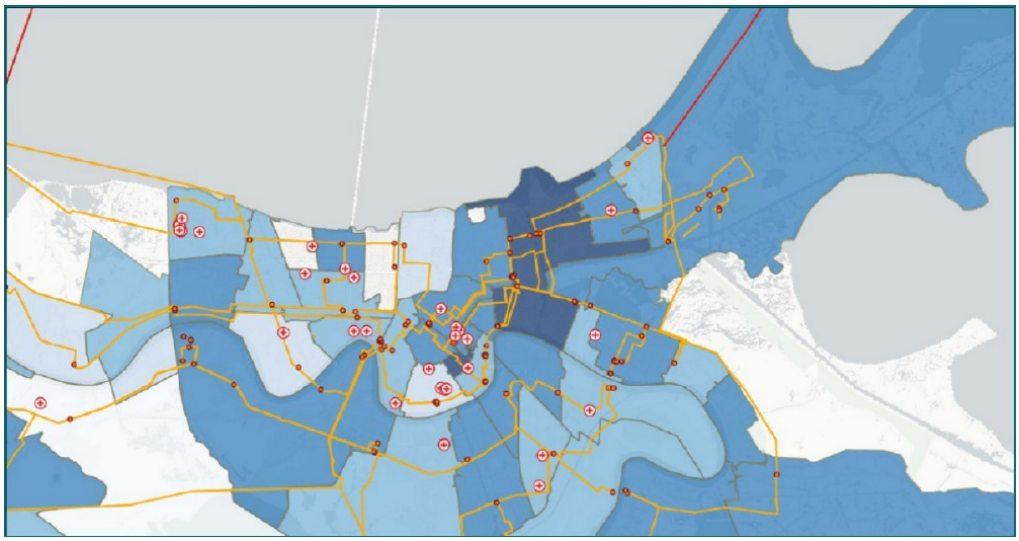
- **Cross-sector operating pathway:** Define how organizations move from identification to funding, program connection, implementation, and handoffs between systems.
- **Coordinated roles and financing:** Clarify who contributes clinical knowledge, energy expertise, implementation capacity, program administration, and funding.

What Coordination Could Unlock

- **Earlier and better-targeted intervention:** Direct resources toward people and settings where medical vulnerability and energy risk overlap.
- **Coordinated pathways from need to implementation:** Connect identified medical energy needs to existing programs, eligibility and referral pathways, and appropriate interventions.
- **Shared funding and lower institutional cost burden:** Coordinate energy, healthcare, public, and other funding sources so one organization does not have to carry the full cost of an intervention.
- **Reduced downstream cost pressure:** Create opportunities to reduce avoidable healthcare use while easing pressure on assistance, customer-protection, and preparedness resources.

Medical Energy Risk Profile: New Orleans

Medical energy risk varies by place. This profile brings medically dependent population, energy affordability, electric-service reliability, infrastructure, and modeled healthcare spending into the same local view.



Patient population

Blue shading shows HHS emPOWER counts of electricity-dependent Medicare beneficiaries by area. The gradient runs from lighter blue for lower counts to darker blue for higher counts.

Healthcare geography

Hospitals, federally qualified health centers, other relevant facilities, populations, and service areas show where healthcare and medically vulnerable needs are concentrated.

Energy infrastructure

Transmission lines, substations, reliability conditions, service areas, and other energy-system information show the electricity and infrastructure conditions affecting each area.

Energy Context

• Affordability Context

7,314 Households
in 14 high-energy-burden census tracts

Tracts at or above DOE's 6% high-energy-burden reference.[1]

• Reliability Context

2.00 interruptions · 586.4 minutes
per customer / year, all events

Without Major Event Days: 1.40 interruptions · 153.6 minutes per customer / year.

2020–2024 EIA-861 median annual reliability exposure.[2]

Health & Healthcare Context

• Medically Electricity-Dependent Population

2,698 Medicare beneficiaries

July 2026 HHS emPOWER beneficiaries with qualifying electricity-dependent medical equipment or device claims.[3]

• Healthcare Spending Exposure

$462K to $2.31M

Scenario-based sensitivity range of potential inpatient-equivalent healthcare spending from one widespread-outage scenario under alternative utilization assumptions.[4]

Produced using EcoDex, Galvanista's analytical and decision-support framework.

Building Medical Energy Security in New Orleans

Many of the resources needed to address medical energy risk already exist. The opportunity is to connect health needs to existing programs, institutions, and implementation capacity across systems that normally operate separately.

A Pathway for Building Medical Energy Security

1	2	3
IDENTIFY NEED	**CONNECT TO EXISTING PROGRAMS**	**IMPLEMENT**
Determine where medical energy risk is concentrated and who may be affected.	Link identified needs to existing program pathways, eligibility channels, and referral mechanisms.	Screen sites and participants, determine appropriate interventions, and coordinate delivery.
In New Orleans		
• EcoDex geographic risk information • City emergency-preparedness systems and registries • Federally qualified health centers, community health centers, hospitals, and clinics • Health plans, care-management organizations, and public-health and community referral networks	• Neighborhood Power Plan • Utility programs • Energy assistance programs • Healthcare referral and enrollment pathways • Proposed health eligibility layer to connect medically vulnerable households and facilities	• Participant enrollment and navigation • Household and facility screening • Battery and backup-power suitability • Other DER feasibility assessment, where applicable to other programs • Technology matching and installation coordination • Participant and community support

Existing Opportunity

New Orleans now has an approved implementation pathway for battery backup systems through the Neighborhood Power Plan. A proposed health eligibility layer could help connect medically vulnerable households to available battery-resilience resources and support coordinated enrollment and implementation.

New Orleans Neighborhood Power Plan

LMI Priority	Program Funding	Potential Scale	Eligible Systems	Proposed Health Eligibility Pathway
40% of upfront funding[5]	**$23.6M[5]**	**~800 homes + 200 businesses[5]**	**Battery backup systems[5]**	**Eligibility + Referral**
Reserved for low- and moderate-income households.	Approved funding for battery backup systems under current implementation parameters.	Approximate program reach under current implementation framework.	Eligible Entergy New Orleans customers can participate through qualifying systems.	A health eligibility and referral pathway could help connect medically vulnerable households with available resilience resources.

Sources and Notes

Medical Energy Risk Profile: New Orleans

[1] U.S. Department of Energy, Low-Income Energy Affordability Data (LEAD) Tool.

Project analysis identified **7,314 estimated households within 14 New Orleans census tracts** meeting or exceeding the 6% high-energy-burden reference. The figure is an area-level estimate and does not classify individual households. LEAD uses ACS 2018–2022 five-year data and EIA utility data; DOE defines high energy burden at 6% or greater. Data vintage: 2022.

[2] U.S. Energy Information Administration, Form EIA-861, Annual Electric Power Industry Report, Reliability data.

Report values are medians of annual SAIFI and SAIDI observations for 2020–2024, shown under All Events and Without Major Event Days reporting conditions. SAIFI represents interruptions per customer per year; SAIDI represents interruption minutes per customer per year. The 2024 Electric Power Annual data were released October 16, 2025.

[3] U.S. Department of Health and Human Services, HHS emPOWER Map. July 2026 project extract.

The project extract identifies 2,698 Medicare beneficiaries in New Orleans with qualifying electricity-dependent medical equipment or device claims. HHS emPOWER provides de-identified, claims-based Medicare counts by geography and is updated monthly. The figure should not be interpreted as the total medically electricity-dependent population of New Orleans.

[4] EcoDex modeled healthcare spending scenario-based sensitivity analysis, New Orleans.

Illustrative planning range of potential inpatient-equivalent healthcare spending associated with one modeled widespread-outage scenario under alternative utilization assumptions. The range is modeled, not observed outage-attributable spending, and should not be interpreted as a causal estimate. The underlying planning analysis used 2023 Medicare Fee-for-Service payment benchmarks; an earlier reference scenario used a 2% illustrative acute-care utilization assumption.

[5] New Orleans City Council, Substitute Resolution R-26-421, adopted October 1, 2026, Docket UD-24-02, and related Council implementation materials.

Current implementation parameters describe $23.6 million for battery backup systems for approximately 800 homes and 200 businesses, with 40% of upfront funding reserved for low- and moderate-income households. Reverified: October 10, 2026.

Full source notes and methodology: Galvanista.com

Request a Medical Energy Risk Profile

Medical Energy Risk Profiles for defined geographies and healthcare service areas are available at no cost and provide a preliminary, place-based view of medically relevant populations and energy conditions. They are designed to help organizations understand where medical energy risk is concentrated and whether deeper analysis or action may be warranted. The New Orleans profile is one example.

Applying EcoDex to Other Populations and Places

Geographies & Service Areas	Organization-Defined Populations
• FQHC service areas • Hospital and health-system service areas • Cities, counties, and states • Utility territories	• Public and private payer populations • Medicaid / MCO, Medicare / MA, and PACE populations • ACO-attributed populations and patient panels • Program cohorts and other defined populations

Profiles for organization-defined populations may require separate scoping, appropriate partner data access, and permitted use.

Applying EcoDex to Programs and Interventions

Where a specific program, intervention, or evaluation question warrants deeper analysis, EcoDex can support targeting and evaluation.

Program & Intervention Targeting	Intervention Evaluation
Use medical-energy risk information to identify priority areas for outreach, participant screening, referral, and program deployment. • Battery resilience • Solar + storage • Utility assistance • Community solar • Medical-customer programs • Other distributed-energy programs	Evaluate energy and healthcare outcomes after implementation using the program, exposure, utilization, or claims data appropriate to the intervention. • Energy-cost outcomes • Service continuity • Healthcare utilization • Claims spending • Program outcomes

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EcoDex is Galvanista's analytical and decision-support framework.