



LONG-TERM CARE DATA COOPERATIVE

RESEARCH CATEGORIES, TOPICS, & EXAMPLES

The Long-Term Care (LTC) Data Cooperative is a nursing home provider-led, data-sharing consortium that makes nursing home electronic health record (EHR) data linked with Medicare claims available for the following broad purposes:

1. **Health care operations and population health analytics**, including customized reports to participating provider organizations;
2. **Public health surveillance**, to monitor aggregate trends;
3. **Observational, comparative effectiveness research**; and
4. **Clinical research studies**, including provider and patient recruitment into Phase 3 and Phase 4 randomized trials.

To achieve purposes 3 and 4 in the list above, the LTC Data Cooperative encourages researchers to develop proposals that fall within these approved research categories, and determine whether the LTC Data Cooperative's data has existing data to meet the needs of each study protocol.

Additionally, researchers with existing relationships with nursing homes are encouraged to contact the LTC Data Cooperative about enrolling them. This will allow researchers to more easily access the clinical data needed to close the evidence gaps in long-term care. Interested researchers can contact LTCDataCooperative@AHCA.org for more information.

RESEARCH TOPICS AND EXAMPLES

There are many possible topics to explore in observational comparative effectiveness research and intervention studies in nursing homes. We have grouped possible focus areas into 12 broad categories, ranging from clinical conditions to staff education and treatments. Examples within each of these categories are provided below.

Clinical Care

- ADL care
- Care transitions (e.g., between settings or discharge to home)
- Change in condition (e.g., recognition and management)
- Clinical monitoring
- Communication (e.g., between nursing and primary care providers)
- Deprescribing
- Education, including modes and topics (either to staff or residents/families)
- Falls prevention
- Health technologies (e.g., continuous glucose monitors, automated vital signs)
- Infection control
- Nutrition
- Pain assessment and management
- Patient function and independence
- Prescribing
- Psychological and behavior symptoms of dementia

Clinical Conditions

- Diabetes
- Dementia and cognitive impairment
- Falls
- Frailty
- Functional impairment (e.g., ADLs)
- Heart failure
- Injuries
- Mental health (e.g., depression, or psychosis)
- Mobility
- Pain
- Surgical management
- Pressure ulcers
- Sensory deficits (e.g., hearing, vision, or neuropathy)
- Stroke



Clinical Conditions (continued)

- Substance use disorders (e.g., alcohol or opioid)
- Speech disorders
- Swallowing disorders
- Traumatic Brain Injury
- Weight loss

Care Models

- Advanced practice clinicians (i.e., NPs or PAs)
- Alternative staffing (e.g., medication technicians or feeding assistants)
- Greenhouse or similar
- Long-term care pharmacy consulting and programs
- Telehealth (e.g., medicine or rehabilitation services)

Clinical Monitoring and Testing

- Change in condition
- Clinical laboratory tests
- Cognitive function
- Electrocardiograms
- Functional outcomes
- Glucose monitoring
- Point of care testing (e.g., urinalysis, INR, or glucose)
- Remote monitoring (e.g. vitals, movement, falls, or glucose)
- Radiology, including ultrasound
- Vital signs
- Weight

Dementia Care

- Activities
- Antipsychotics and other psychotropic medications
- Behavioral and psychological symptoms
- Communication
- Non-pharmacological management
- Staff education
- Resident-resident interactions
- Staff-resident interactions
- Staff experiential learning
- Wandering and elopement



Environment

- Air quality
- Built environment (room, floor design)
- Call lights
- Dining
- Disaster preparedness
- Flooring (e.g., to prevent falls)
- Lighting
- Noise
- Secure unit

Equipment

- Adaptive devices (e.g., feeding utensils or amplification devices)
- Beds
- Chairs
- Mechanical lifts
- Walkers or wheelchairs
- Visual aids

Infections and Infection Control

- Antibiotic stewardship
- C. difficile, norovirus
- Cellulitis
- COVID-19
- Environmental cleaning
- Influenza
- Infection control (e.g., hand hygiene, masking, or PPE)
- Multidrug resistant organisms (e.g., MRSA or VRE)
- Pneumonia
- Sepsis
- Upper respiratory infections (e.g., RSV, human metapneumovirus)
- Urinary tract infections
- Vaccines
- Wound infections



Medications

- Drug interactions
- Administration of
- Prescribing of
- Medication management and monitoring
- Medication reconciliation
- Pain management
- Polypharmacy

Staff Education

- Clinical topics
- Dementia care
- Infections and infection management
- Communication techniques

Technology

- Adaptive lighting
- Alarms or alerts
- Barcode Medication Administration Record (MAR) systems
- EMR, including prompts or reminders
- Monitors
- Pumps for administering intravenous therapies
- Robotic pets or dolls
- Telemedicine
- Telemonitoring

Treatments

- Biologic therapies
- Dialysis
- End-of-life or hospice
- Intravenous medications or fluids
- Medical devices (e.g., insulin pumps or pacemakers)
- Medications for various conditions
- Palliative care
- Rehabilitation services (e.g., occupational, physical, respiratory, or speech)
- Recreational therapy and activities
- Respiratory treatments (e.g., inhalers or nebulizers)
- Respite care

