



Best Practice: Telemonitoring

Leadership Track



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Leadership Section Objectives

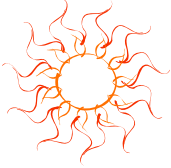
The Telemonitoring Best Practice Intervention Package is primarily designed for agencies that are either utilizing telemonitoring or are investigating/planning for implementation in the near future.

Objectives

After completing the activities included in the Leadership Section of this **Best Practice Intervention Package – Telemonitoring**, the leader will be able to:

1. Define telemonitoring.
2. Evaluate the agency's current use of telemonitoring.
3. Identify how telemonitoring can be used effectively by a home health agency.
4. Describe two leadership applications for telemonitoring.
5. Identify resources for developing and sustaining a comprehensive and efficient telemonitoring program.

Telemonitoring: Leadership Track



This sixth best practice intervention package, **telemonitoring**, is the final package of the **Simply Summer Series** that focuses on **telehealth**.

Utilize telemonitoring effectively and efficiently to reduce acute care hospitalizations.

Building Upon the Foundation: Next Steps



Once you have established your foundation for reducing acute care hospitalization (ACH), such as implementing hospitalization risk assessments and emergency care planning, your agency can continue to add more advanced building blocks (additional interventions).

All previous Best Practice Intervention Packages are available on the HHQI Web site www.homehealthquality.org

Best Practice Intervention Package Schedule

Month	Best Practice Topic	RN Contact Hours available	Therapy Certificate of Participation available
03/01/07	Hospitalization Risk Assessment	N/A	N/A
04/02/07	Patient Emergency Plan	1.25	N/A
05/01/07	Medication Management	2.0	N/A
06/01/07	Phone Monitoring and Frontloading Visits	1.5	1.2
07/02/07	Teletriage	1.7	1.0
08/01/07	Telemonitoring	1.0	1.0
09/04/07	Immunization		
10/01/07	Physician Relationships		
11/01/07	Fall Prevention		
12/03/07	Patient Self-Management		
01/02/08	Disease Management		
01/01/08	Transitional Care Coordination		

How to Use this Package

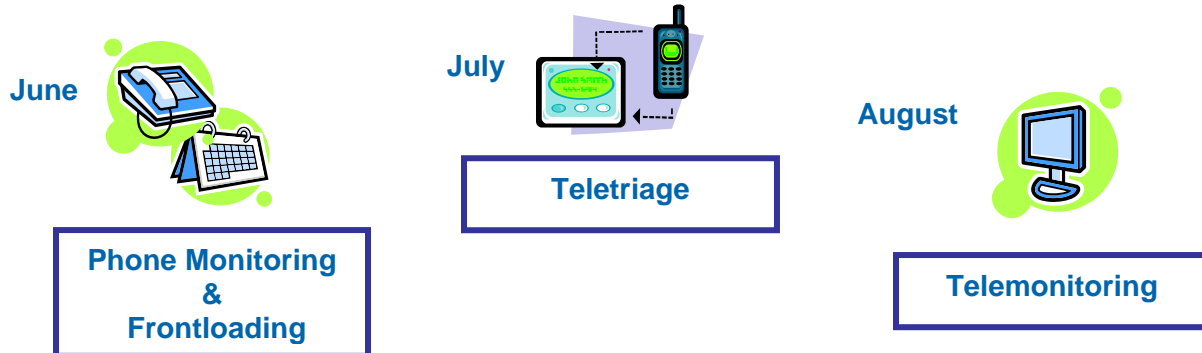


The **Telemonitoring Best Practice Intervention Package** is primarily designed for agencies that are either **utilizing telemonitoring or are investigating/planning for implementation** in the near future.

Your agency's current telemonitoring status	How to use this Best Practice Intervention Package - Telemonitoring
<ul style="list-style-type: none"> ❑ NOT using telemonitoring 	<ul style="list-style-type: none"> • Focus on implementing ideas from the Phone Monitoring & Frontloading Visits Best Practice Intervention Package (www.homehealthquality.org) as a cost effective way to utilize telehealth • Keep this package as a resource for future use • Read the Leadership Track for informational purposes
<ul style="list-style-type: none"> ❑ Exploring purchase of telemonitors 	<ul style="list-style-type: none"> • Review the Leadership Track to assist with telemonitoring implementation decision making • Utilize the <i>Home Telehealth Reference 2005</i> as a resource for assistance with developing a telemonitoring program (available on www.medqic.org, under Home Health, Telehealth, Tools)
<ul style="list-style-type: none"> ❑ Using telemonitoring, but need to optimize to achieve maximum benefits 	<ul style="list-style-type: none"> • Review the Leadership Track • Complete the agency self-assessment, review agency action items and select applicable activities to incorporate into agency practices and processes • Review connection pages and distribute individual pages to appropriate staff to understand their role in telemonitoring • Reference the <i>Home Telehealth Reference 2005</i> and <i>2006/2007</i>, and the <i>Home Telehealth Disease Management Series Toolkit</i> (www.medqic.org) • Distribute the individual care provider tracks (Nursing, Therapy, Social Worker and/or Home Health Aide) • Encourage RNs and Therapists to apply for FREE contact hours or certificate of participation; copy certificates for agency education documentation
<ul style="list-style-type: none"> ❑ Using telemonitoring optimally, but need a few ideas to ensure efficiencies 	<ul style="list-style-type: none"> • Review the Leadership Track • Complete the agency self-assessment, review agency action items for ideas to optimize practices and processes • Review connection pages and distribute individual pages to appropriate staff to understand their role in telemonitoring • Use the individual care provider tracks (Nursing, Therapy, Social Worker and/or Home Health Aide) for annual staff competencies • Remind RNs and Therapists to apply for FREE contact hours/certificate of participation

Telemonitoring: Leadership Track

Simply Summer Series



The Home Telehealth *Simply Summer Series* (June-August) focuses on the three basic components of telehealth: phone monitoring, teletriage and telemonitoring. The series began with Phone Monitoring and Frontloading Visits and concludes with this month's package, **Telemonitoring**.

The Schedule for the Home Telehealth *Simply Summer Series* is as follows:

June 2007	Phone Monitoring and Frontloading Visits
July 2007	Teletriage
August 2007	Telemonitoring

Consider combining telehealth interventions

- Agencies may employ **both telemonitoring and phone monitoring**. Agencies using telemonitoring may offer phone monitoring for patients waiting for monitors or for those patients who do not meet the patient selection criteria for telemonitoring.
- **Teletriage:**
 - o Is an **unscheduled, appropriate disposition** of health-related problems by skilled clinicians via telephone or electronic information processing technologies that have been initiated by the patient/caregiver (*Home Telehealth Reference 2006/2007*).
 - o Occurs at all home health agencies—every hour of every day!
 - o Consistent **teletriage processes support** effective phone monitoring and **telemonitoring**.

Telemonitoring



Telemonitoring definition:

- Telemonitoring includes the collection of clinical data and the transmission of such data between a patient at a distant location and a health care provider through electronic information processing technologies.
- The provider conducts a clinical review of the transferred data and provides a response relating to such data. Telemonitoring is the more sophisticated type of home telehealth (*Home Telehealth Reference 2005*).
- Telemonitoring technologies may include:
 - Remote monitoring, including pulse oximetry, vital signs, EKG, weight and blood glucose
 - Messaging
 - Video transmission, such as a demonstration of a new procedure or a digital image of a wound

Simply Stated:
Telemonitoring is the **remote care** delivery between a patient in his or her place of residence and a health care professional **using electronic technology**.

Benefits of telemonitoring:

- Provides for **timely intervention** when there is a decline in a patient's health status
- Improves patient **symptom surveillance** and outcomes
- Reinforces patient/caregiver **self-management** education and enables patient/caregiver to better understand his/her disease state
- **Decreases anxiety** in patients/families who are, at times, overwhelmed with caregiving issues
- Provides for **increased communication** with patients at risk for hospitalization
- Provides **real-time information to physicians** enabling informed decisions on medication and treatment modifications
- Encourages **active involvement of patient** as a member of the home care team
- Increases patient/caregiver satisfaction, as they feel better supported on non-visit days
- **Improves medication management** as patients see how medications immediately affect vital signs
- Permits patient visits to be provided as needed, **reducing clinically unnecessary visits**
- **Supports resource conservation**, especially staff allocation
- Provides for the reinforcement of **patient emergency care planning**
- **Increases agency efficiency** and **reduces costs** through decreased travel time and expense
- **Increases the agency's value** to patients/caregivers, physicians, hospitals and payors
- **Increases nurse caseload** without overly burdening clinical staff
- **Provides a marketing edge** from those agencies that are not using advanced technologies to manage care
- **Supports avoidable acute care hospitalization reduction activities**

Telemonitoring



Telemonitoring considerations for leadership:

Scheduling

Utilize monitoring data to assist with making a clinical decision about when to schedule an onsite visit.

- Telemonitoring encounters need to be formally scheduled and tracked
- A telemonitoring encounter is not an onsite encounter
- Determine how telemonitoring is scheduled for set up, removal and included in day-to-day activities (Set up and removal of telemonitoring unit may be part of an onsite encounter)
 - Set up/Removal—Decide which discipline will perform set up and removal and complete patient education
 - Encounters—Decide who is responsible for reviewing and responding to telemonitoring data (office nurse, case manager, designated triage nurse, etc.)

Patient/Caregiver Selection Criteria

- Able to hear, answer and talk clearly on a telephone
- Accepts the use of telemonitoring
- Able to self-monitor
- Able to read and safely connect to and utilize a telemonitoring unit
- Access to electricity, phone line or other telecommunication media per vendor requirement



Patient/Caregiver Exclusion Criteria to Consider

- Patient physically or cognitively unable to monitor AND does not have a caregiver
- Unsafe home environment (electrical, fire, water, infestation hazards)
- Patient is combative or has psychotic problems
- Patient is receiving daily skilled nursing visits

Physician Orders

- Consult with state survey agency to determine the need for physician orders
- May include on Home Health Certification and Plan of Care (HCFA-485) or on physician order forms
 - Example “Daily home telemonitoring of weight, blood pressure, pulse oximetry”
 - Physician prescribed pre-established parameters (e.g. additional 40 mg lasix orally for 3 pound weight gain in 48 hours; notify physician if BP is greater than _____)



Informed Consent

- Use of a separate informed consent form is recommended due to the complex nature of telemonitoring and the associated patient risks and responsibilities
- Use agency approved consent form (vendors usually have sample consent forms and a sample is provided in the *Home Telehealth Reference 2005*)

Confidentiality

- Receive telemonitoring data and conduct telemonitoring follow-up calls in a private area where confidential patient information remains protected
- Use agency phones to prevent patients with caller ID from obtaining staff home or cell phone numbers



Cell Phone Tip – most cell phones will block caller ID by preceding the call with ***67**

Documentation

- Document home telemonitoring patient encounters via special documentation forms (or screens on computerized systems) or by utilizing an existing form or documentation system

Staff Education and Competency

- Ensure all staff understand and comply with telemonitoring protocols and agency processes
- Include telemonitoring program goals into staff orientation



Patient Education

- Benefits of telemonitoring
- Phone safety
- Self-monitoring coaching tips
- Understanding that the telemonitoring unit is not an emergency response system and does not replace emergency care

Infection Control

- Cleaning and disinfecting of equipment should be done according to the manufacturer or vendor instructions
- Ensure that all staff who clean equipment understand and comply with agency telemonitoring infection control protocols

“Telemonitors assist the health care team to work more efficiently, using objective and subjective data to improve patient oversight and outcomes.”

Marie Ruhland, BSN, Director
Hilo Medical Center Home Care

Telemonitoring Agency Self-Assessment



Processes	Y	N
Does your agency:		
Have specific telemonitoring acceptance criteria?		
Have protocols specific for telemonitoring? (e.g. patient consents, infection control, documentation)		
Have defined telemonitoring job responsibilities? (e.g. Intake nurse or Case Managers complete daily telemonitoring data evaluation)		
Have a plan for: <ul style="list-style-type: none"> ○ Patients who do not meet criteria for telemonitoring, but would benefit from telehealth? ○ Patients who meet criteria but there are no available telemonitors? 		
Utilize all available telemonitors? (Are telemonitors setting on shelves?)		
Encourage intake or admission nurses to evaluate new referrals for telemonitoring?		
Place monitors as early as possible in the episode?		
Evaluate for telemonitoring at all points of care, including recertification?		
Apply a visit frequency that reflects telemonitoring ? (e.g. using monitor data to determine need for onsite visit)		
Incorporate telemonitoring into the 485/Plan of Care?		
Staff Education and Involvement	Y	N
Is your leadership concerned with staff buy-in for telemonitoring?		
Have all staff been educated on agency goals for telemonitoring and benefits to patients and caregivers?		
Does staff appreciate the value of telemonitoring as an intervention to improve the quality of care provided?		
Are clinicians (including therapists, medical social workers and aides) promoting appropriate use of telemonitors?		
Have you identified a clinical nurse telemonitoring champion?		
Have you identified a physician telemonitoring champion? (e.g. agency medical director)		
Does your agency have a telemonitoring component in orientation?		
Does your agency have annual telemonitoring competencies specific for each discipline's telemonitoring responsibilities? (e.g. Home Health Aide—infection control with cleaning of telemonitors, if applicable; Nursing—patient education with telemonitors)		
Do you provide incentives for your staff to promote telemonitoring?		

Evaluation	Y	N
Does your agency:		
Disseminate physician surveys to obtain their input on telemonitoring data and value to their practice?		
Ask patients to evaluate their telemonitoring experience?		
Evaluate cost effectiveness of telemonitoring?		
Compare the hospitalization rate of patients with and without telemonitoring?		
Monitor the census of patients with telemonitors?		
Track the number of PRN visits per monitored patients?		
Collect anecdotal patient success stories?		
Care Coordination	Y	N
Are telemonitoring findings included in case conferences?		
Does your agency have a process for effectively and confidentially transferring or providing data to physicians in a timely manner?		
Is your agency actively marketing your telemonitoring program?		
Do you receive referrals based on agency telemonitoring program?		
Does your intake or admission staff communicate with existing referral sources/physicians/hospital discharge planners to identify patients for telemonitoring?		

“Although implementing a telemonitoring service can be costly to an agency, the long-term benefit is well worth the cost. If an agency is looking at long-term visibility in the community with a higher model of care than the rest of the pack, they have to telemonitor.”

Joan Plessmeyer, CEO, president and owner
 Los Robles Homecare Services
 Thousand Oaks, California

Home Telehealth Protocol for Telemonitoring



Purpose: To provide telemonitoring guidelines for home care agencies

Policy: Implement telemonitoring with patients as supported by their clinical condition and agency patient selection criteria, including emergency plan, in the event of a disaster

Procedure: Agency leadership will establish guidelines that outline the process for telemonitoring that include, but are not limited to the following:

Patient selection criteria:

Diagnoses
Hospitalization risk assessment score
Ability to self-monitor
Ability to read and safely connect to and utilize a telemonitoring unit
Electricity, phone line or other telecommunication media per vendor requirement

Clear direction and job description for staff who review and respond to telemonitoring data

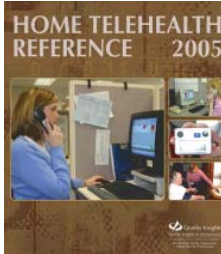
Agency-specific telemonitoring documentation guidelines

Evaluation criteria & parameters:

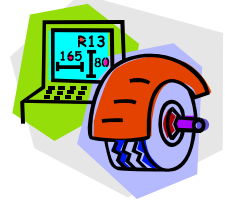
- Monitor utilization: Are patients receiving telemonitors per agency patient selection criteria?
- Is telemonitoring documented per agency guidelines?
- Correlate outcomes: Evaluate recently hospitalized patient records. Did they meet the criteria for 'at-risk' for hospitalization? If so, was telemonitoring implemented?

Telemonitoring

Don't re-create the wheel... utilize the *Home Telehealth Reference 2005* for telemonitoring forms and guidelines.



Available on MedQIC
[Home Telehealth Reference 2005](#)
or go to
www.homehealthquality.org
For Home Health Agencies, Resources



The following telemonitoring templates are available in the *Home Telehealth Reference 2005*:

<input type="checkbox"/> Home Telehealth Patient Selection Criteria
<input type="checkbox"/> Home Telehealth Patient Encounter Documentation Forms
<input type="checkbox"/> Telemonitoring Informed Consent Form
<input type="checkbox"/> Telemonitoring Employee Orientation Checklist
<input type="checkbox"/> Employee Telemonitoring Skills Checklist: Basic System Information
<input type="checkbox"/> Employee Telemonitoring Skills Checklist: Telemonitoring Unit
<input type="checkbox"/> Telemonitoring Patient/Caregiver General Instruction Sheet
<input type="checkbox"/> Patient Telemonitoring Skills Checklist
<input type="checkbox"/> Telemonitoring Infection Control Policy
<input type="checkbox"/> Telemonitoring Patient Satisfaction Survey

Telemonitoring Checklist for Clinicians

Telemonitoring includes the collection of clinical data and the transmission of such data between a patient at a distant location and a health care provider through electronic information processing technologies. The provider conducts a clinical review of the transferred data and provides a response relating to such data.

Telemonitoring Checklist

Patient selection criteria

- Accept use of telemonitor
- Able to self-monitor
- Able to read and safely connect to telemonitor

Confidentiality

- Receive data and follow-up in private area

Scheduling

- Schedule and track encounters
- Include patient in scheduling data transmission times

Documentation

- Always document!
- Use agency approved form

Patient Education

- Why telemonitoring
- Call schedule
- Phone safety
- Self-monitoring
- Not an emergency response system



Telemonitoring = Reducing Avoidable Hospitalizations

- Increases symptom surveillance
- Improves patient self-management
- Detects early changes in health status
- Provides real-time data to the physician
- Offers better communication with patients at high risk for hospitalization
- Enables patients to learn more about managing their acute/chronic condition
- Prompts patient to seek earlier medical attention

Do you have telemonitors that are not in use?

Solutions:



**Provide Incentives
for Staff**

Can be for:

- individual
- entire staff
- team that has used the monitor effectively



**Consider All Patients
as Potential Candidates
for Telemonitoring**

- **Scrutinize all referrals; almost every patient can benefit from daily vital sign monitoring, especially in those vulnerable first 2-3 weeks post-hospitalization**
- **Evaluate patients for telemonitoring at all points of care, including resumption of care and recertification**



**Communicate!
Communicate!!
Communicate!!!**

- **Communicate goals of telemonitoring program within the agency from the beginning**
- **Include all disciplines in telemonitoring discussion**
- **Orient new staff**
- **Provide demonstration for staff**
- **Make telemonitoring part of every patient discussion**
- **Share monitoring utilization rates, acute care hospitalization rates and patient successes with physicians**

Leadership Telemonitoring Leadership Action Items



Processes:

- Review current processes for telemonitoring
- Establish patient selection and exclusion criteria for telemonitors
- Ensure that processes for telemonitoring include patient selection criteria and patient education
- Prioritize patients at high-risk for hospitalization for telemonitoring
- Review job descriptions and roles to outline which staff are responsible for reviewing/responding to telemonitoring data and for setup, removal and cleaning
- Establish a telemonitoring protocol, including screening and early placement of monitors (e.g. 48 hours from SOC)
- Update the agency emergency plan in the event of a disaster to include telemonitoring patients
- Develop a plan for patients not receiving telehealth, such as phone monitoring and frontloading
- Establish a process for effective, confidential and timely transfer or provide data to physicians in a timely manner
- Include evaluation for monitor at referral, resumption of care and recertification
- Review retrospective and concurrent data to determine agency-specific ACH risk factors (tally reports) to assist in determining type of telemonitoring
- Establish visit frequency to include telemonitoring
- Utilize the *Home Telehealth Reference 2005* for sample polices, procedures and forms (www.medqic.org)
- Develop evidence-based disease management protocols that incorporate technology
- Develop a marketing plan to promote telemonitoring with referring physicians (utilize Home Telehealth brochure for physicians – pages 26-27)
- Develop standing order protocols and review with physicians to gain buy-in, acceptance and willingness to partner with agency to manage patient outside of emergency department

Staff Education and Involvement:

- Educate staff on agency goals for telemonitoring and benefits to patients/distribute the Telemonitoring Checklist for Clinicians
- Establish expectation that telemonitoring will be incorporated into the 485/Plan of Care when appropriate
- Provide staff education to inform clinicians of any change in telemonitoring processes
- Use the “Do you have telemonitors that are not in use?” document (previous page) to stimulate discussion with middle management about promoting your telemonitoring program
- Ensure that orientation and annual competencies adequately review telemonitoring processes/use the discipline-specific care tracks
- Ask staff to share individual patient success stories as a result of telemonitoring
- Encourage staff to brainstorm to improve processes for telemonitoring

Staff Education and Involvement (continued):

- Establish an expectation that staff will promote telemonitoring as an important component of quality care and service
- Identify a nurse or team telemonitoring champion or utilize a dedicated team
- Create an incentive program to promote telemonitoring
- Encourage participation in agency's technology committees and ongoing education on technology updates (e.g. journals, association e-newsletters)
- Encourage networking among peers to determine best practices for telemonitoring

Evaluation:

- Monitor (chart audits or patient interviews) to evaluate if telemonitoring follows protocol
- Monitor telemonitoring census and utilization of existing monitors
- Survey physicians regarding telemonitoring satisfaction
- Include telemonitoring in patient satisfaction survey
- Share results of evaluation at staff meetings or through other means of communication
- Meet with individuals who do not comply with telemonitoring protocols
- Identify barriers that may keep staff and patients from wanting to use telehealth (e.g. language, fear of technology, perceived cost, information overload)
- Reward clinicians who value and adhere to processes
- Develop tracking system to monitor PRN visits and hospitalization rates of patients with and without telemonitoring

Care Coordination:

- Case conference any patient who could be a potential telemonitoring patient
- Discuss optimum visit schedule including patient telemonitoring support
- Case conference patients who have telemonitors; share successes when early intervention is provided because of telemonitoring data or even hospitalization of patient is prevented
- Educate and collaborate with physicians about home telehealth, patient benefits and your agency's program (include a demonstration)
- Market success of telemonitoring program to referral and potential referral sources
- Demonstrate the effectiveness of telemonitoring to physicians by asking to manage one of their "tough patients"

"Strategies implemented by successful agencies to advance telemonitoring include vision and ownership of the program by administration, including designation of a telehealth champion."

Dawn Murr-Davidson, RN, Director of Branch Operations
VNA Community Care Services, Lancaster, PA

Suggestions for leadership involvement

Home health administrators can:

- Establish policies and directives for telemonitoring
- Incorporate telemonitoring implementation into hospitalization risk assessment
- Determine the specific patient populations that need to be targeted
- Define roles and responsibilities to assure optimization of telemonitoring
- Establish adoption of technology as a component of annual performance review criteria
- Plan strategies to market the agency's telemonitoring program
- Volunteer to participate in telemonitoring studies or present and publish agency results

Clinical managers can:

- Be a telemonitoring champion to encourage staff buy-in
- Assist clinicians with selecting patients for telemonitoring
- Ensure that telemonitoring of patients is included in case conferencing
- Be a telemonitoring champion to physicians and help them see the significance to improving patient care
- Acknowledge clinicians that demonstrate value of telemonitoring

Quality improvement leadership can:

- Educate all staff regarding telemonitoring principles, processes and applications
- Create a standardized positive and effective presentation of technology to providers and patients
- Monitor to determine if telemonitoring is being used with appropriate patients
- Monitor data to indicate success of reducing acute care hospitalization
- Share patient case studies and/or success stories that describe how these interventions prevented hospitalizations

Leadership Action Plan

Using the Leadership Action Items (previous three pages), request that your leadership team members select and prioritize **two to four items** that they want to implement or modify. Remember, you will have four weeks to review, plan and implement some key action items, since another important best practice intervention will be released at the beginning of the following month. Some items may take longer to implement than four weeks, but a project plan should be developed to implement the action items timely. You may choose to add more action items after accomplishing your priority action items.



If you are not ready to implement action items at this time, download and save the materials and plan a more appropriate time to implement.

Date	Action	By Whom	Status
	Review care discipline tracks to determine what portions of this Best Practice Package – Telemonitoring you choose to use and how you want to utilize them.		

Implementation Tools: How to Use Telemonitoring

Patient & Family Connection

- Distribute to staff who create telemonitoring materials or provide education to staff to read this connection page and then evaluate the agency's current education programs and materials

Physician Connection & Home Telehealth Brochure

- Utilize this connection page with the brochure at an administration or management meeting to initiate a brainstorming session to formulate a marketing plan for your physicians

Managed Care Connection

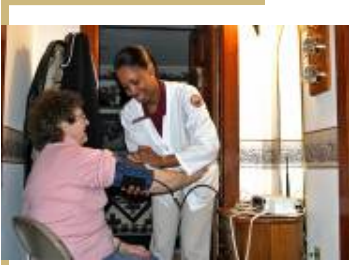
- Use this document as an educational tool for leadership and managers to consider the benefits that telemonitoring can provide to the agency and patients for your managed care population

Telemonitoring Awareness Poster

- Use campaign posters as visual reminders of Home Health Quality Improvement (HHQI) interventions to reduce avoidable hospitalizations
- Display all telehealth series posters together (Phone Monitoring & Frontloading Visits, Telerriage and Telemonitoring)

Success Stories

- Insert one of the stories in your agency newsletter for staff
- Read at staff meetings, distribute in mail boxes, post on bulletin boards



Patient – Family Connection

Self-Management Telemonitoring

Patient Concerns about Telemonitoring:

- “What will the equipment look like? How big will it be?”
- “I can’t use a computer, so how can I use telemonitoring equipment?”
- “What should I do if I can’t get it to work?”
- “Can it hurt me?”
- “Can your agency see me all the time? Does it work like a hidden camera?”
- “If I break it, do I have to pay for it?”
- “Will I keep the equipment after the nurses stop visiting?”
- “Does my doctor get all the information from the machine?”
- “If I start using it and don’t like it, can I give it back?”
- “Will I have to pay for this service?”

Solutions:

Written telemonitoring materials (e.g. pamphlets, brochures, patient education)

- **Use lay language; avoid medical jargon**
- **Address patient fears and myths**
- **Provide pictures of elderly patients using the monitor**
- **Include patient testimonials**
- **Describe patient benefits**

Educate clinical staff in effective approaches to introducing telemonitoring to patients/families

- **Use good communication skills (speak slowly, calmly and in lay language, avoiding medical jargon)**
- **Address all patient questions (use the above list as a starting point)**
- **Evaluate if the message sent about telemonitoring was the message received**
 - **Example: Patient hears “That machine will check on me.” Rather than “This monitor should give me peace of mind while I am getting better.”**

Physician Connection

Telemonitoring



Emphasize with physicians—**telemonitoring** is a **tool** to **manage chronic diseases and at-risk patients**



Key: Combine telemonitoring with patient-specific parameters and prn proactive orders (standing orders*)
Standing Orders + Telehealth = ↑ Efficiency for Every Health Care Provider

*** Check with state standards for guidance on standing orders.**



What the doctor said...

“Physicians do not want to be inundated with data. Must individualize patient parameters and then let the physician receive useful information.” Joseph G. Ouslander, MD

“Telemonitoring data needs to be adjusted at the patient level. Physicians will need to actively participate to set goals to patient specific parameters.” Dennis M. Manning, MD, FACP, FACC

“The concept of standing orders is inherent in telemonitoring... to increase efficiency in the process.” Timothy R. Gutshall, MD

“The primary care physician needs to understand that telemonitoring allows for more frequent assessment of the patient; and what a home health agency can do related to telemonitoring. Demonstrate the telemonitors to physicians.”
Jane C. Pederson, MD, MS



Consider the following potential benefits and negatives when marketing and educating physicians about telemonitoring:

Telemonitoring benefits for physicians:

- ❑ **Improved management of chronic disease**
- ❑ **Decreased calls to the physician from the patient**
- ❑ **Decrease in acute care hospitalizations by early identification of symptoms**

Telemonitoring negatives for physicians:

- ❑ **Lack of trust by physician in the technology**
- ❑ **Data overload**
- ❑ **Increase in contacts from home health agencies**

“We now have physicians who regularly view their patient’s data online. Doctors are now requesting that units be placed in their patient’s homes so they can view or receive data instead of referring them to the emergency department.”

-Vickie Lynch, RN, BSN, MSB, Home Health Director, Good Samaritan Home Care, Preston, MN

HOME TELEHEALTH... BENEFITS FOR PATIENTS & PHYSICIANS

The Centers for Medicare & Medicaid Services (CMS) has identified that the improvement priority for home health care agencies is to reduce avoidable acute care hospitalizations.

Physicians are key partners in this endeavor. When physicians define clear-cut parameters for identified patients, home health agencies are better prepared to educate, enforce and monitor patient adherence behaviors and respond quickly to potential problems.

Home telehealth programs benefit physicians and their patients through increased patient adherence to treatment plans, the development of self-care management skills, **fewer physician phone calls**, decreased avoidable hospitalizations and improved patient satisfaction and outcomes.

(agency name) is pleased to provide:

(specify type(s) of telehealth programs) for patients on service.

- _____
- _____
- _____



Home Health...The Requirements

- Home health agencies must be Medicare certified to provide services
- **Home health care services must be ordered by a physician**

Who is Eligible for Home Health?

Medicare Home Health Criteria

Medicare and Medicare Advantage Organizations provide home health care benefits to patients meeting the following criteria:

- Patients must need at least one of the following:
 - intermittent skilled nursing care
 - physical therapy
 - speech language pathology or
 - continue to need occupational therapy.
- Patients must be homebound, or normally unable to leave home unassisted. To be homebound means that leaving home takes a considerable and taxing effort. The need for adult day care does not prevent patients from receiving home health
- Medicare will also cover home health aide services for personal care and medical social services for counseling and community resources for qualified patients.

For additional information on home care services and availability, please contact:

(Agency Name)

(Address)

(Phone #)

HOME TELEHEALTH THE PHYSICIAN CONNECTION



Home telehealth programs are being implemented across the nation as an intervention to support reduction of avoidable hospitalizations.

Home telehealth includes:

- Triage
- Phone monitoring
- Telemonitoring

Physicians play a key role in successful home telehealth through collaboration with home health agencies to establish patient specific monitoring parameters.



TELETRIAGE

Teletriage occurs when:

- a patient or caregiver contacts the home health agency by phone with a problem and/or question or
- information is submitted electronically via a telemonitor.

Agency staff then **triage** the patient based upon the information received to determine the best course of action.

Effective teletriage promotes:

- appropriate patient interventions,
- optimal outcomes,
- patient/family satisfaction and
- efficient utilization of resources.

Teletriage may include:

- symptom assessment,
- education/counseling,
- home treatment advisement
- referral to a physician or hospital,
- disease management specific interventions, or
- crisis intervention.

Appropriate teletriage is supported by having pre-established parameters *established by the physician.*



PHONE MONITORING

Phone monitoring is used to decrease avoidable acute care hospitalizations and to enhance patient self-care management behaviors through scheduled phone encounters. Patients selected for phone monitoring are targeted for monitoring based upon a specific diagnosis or are otherwise at risk for frequent hospitalizations.

Phone monitoring calls are provided in addition to home health on-site visits to encourage and monitor patient self-care management skills and symptom status

You may see “**phone monitoring**” on your patient’s plan of care as a supplemental service provided to improve patient clinical outcomes.



TELEMONITORING

Telemonitoring requires the use of technology beyond the telephone. Telemonitoring includes the collection and transmission of clinical data between a patient and a home health care provider.

The home health agency completes a clinical review of the transferred data and provides a response as needed. Successful telemonitoring relies on **physician** direction in establishing patient-specific baseline parameters.

Monitored data may include:

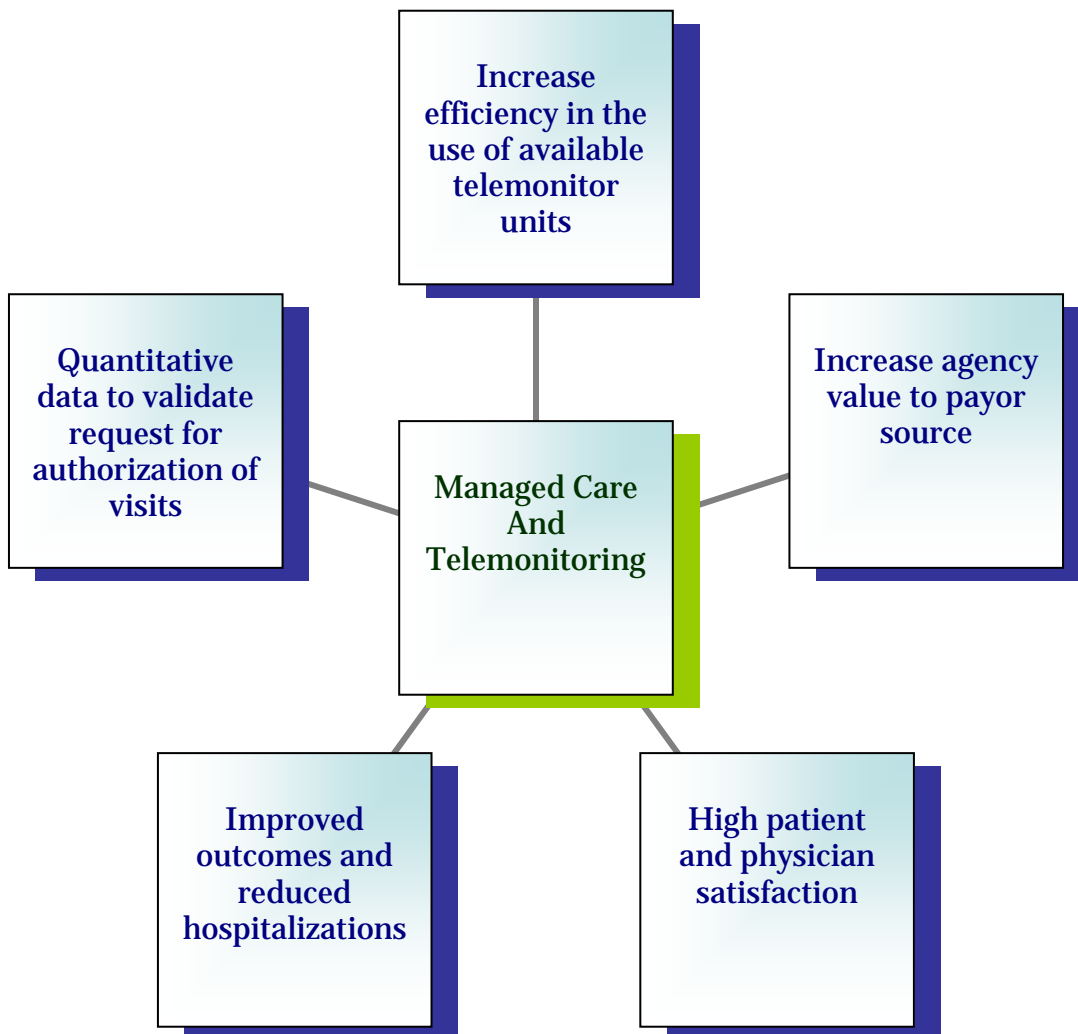
- vital signs
- weight
- oxygen saturation,
- blood glucose levels
- wound status



Managed Care Connection

Telemonitoring

Managed care may not reimburse directly for telemonitoring. Work with managed care payors to negotiate rates for telemonitoring for patients at-risk for hospitalization. However, consider benefits that telemonitoring can provide to your agency and patients for your managed care population without reimbursement.



Leadership Success Story

California Home Health Agency Lowers Acute Care Hospitalization Rate through Telemonitoring Service

Joan Buck-Plassmeyer, CEO, president and owner of Los Robles Homecare Services in Thousand Oaks, California, began evaluating telemonitoring systems in 2003. Plassmeyer faced the challenges of providing high quality care to the more complex patients leaving the hospital sicker and quicker. Considering the possibility of obtaining daily vital signs, including blood pressure, pulse, and temperature, weight and pulse oxygen level, for the more complex patients through a remote device in the home appeared to hold merit. With the nursing shortage, this technology provided an alternative means of obtaining consistent vital information without sending a nurse to obtain this information. Shortly thereafter, the decision was made to invest in purchasing 25 telemonitor devices along with the Central Station.

With the help of her administrator, Sheila Shea, Plassmeyer initiated the use of the telemonitoring devices for patient with selected diagnosis and conditions. Immediately, the staff noticed that by monitoring patients, and having the patient involved in their own care, Los Robles had better patient self care management participation. Patients became more proactive about their health care plan and more willing to make any needed adjustments to improve their own health.

When Los Robles receives a new patient, staff determines on a case-by-case basis whether the patient is a good candidate for telemonitoring. Once chosen for telemonitoring, a nurse delivers the telemonitoring unit to the patient and performs a demonstration and practice transmit test. If family is involved in the patient's care, those relatives are also involved in the walk-through.

The device speaks slowly, loudly and clearly to the patient and can be programmed with ten different languages and 50 questions, such as "do you need your clinician to call you" or "are you experiencing more pain than yesterday." Patients check-in as instructed by their physician for daily weight checks and answer questions about their medications and how they feel. Answers are transmitted directly to Los Robles Homecare, via modem and satellite, so that information can be documented. As red flags appear, nurses call the patient to find out if there is a problem.

"We once noticed a patient had gained eight pounds in a single day," shared Shea. "Our nurse who received the data became concerned and called the patient back. After discussing the situation with the patient, we found out he had been holding his cat when he did his morning weigh-in. He was most appreciative that we called to check on him. Telemonitoring is literally the eyes and ears in the patient's home."

Leadership Success Story (cont.)

Patients are generally thrilled with having the telemonitoring device in their homes. Telemonitoring offers consistent data since it is recorded at the same time each day. Once the data is reviewed by a clinical nurse, appropriate interventions can be implemented if the results are out of parameter for the patient. It may require a nurse visit to the patient to check medication compliance, or a re-check of the vital sign in a few minutes, or a telephone conversation with the physician regarding the findings. These interventions can result in addressing the issues quickly and prevent an emergency room visit. Overall, telemonitoring plays a large role in preventative healthcare.

“Patients today are more complex, often having multiple concerns or symptoms, like diabetes and hypertension,” stated Plassmeyer. “Caring for patients is very different today than ten years ago. We now have patients coming home from the hospital still unstable, which without daily surveillance can contribute to patients being re-admitted to the hospital. Through telemonitoring, we can keep sick patients at home, rather than seeing them hospitalized repeatedly.”

Los Robles saw a significant drop in their acute care hospitalization (ACH) rate. After 12 months of implementing telemonitoring, the agency’s ACH rate was 21 percent, well below the national average at the time. In 2005, it dropped even lower, to 18 percent. The more obvious impact has been the change in patients – and their family members – taking an active role in their healthcare plan. Since patients are monitored daily, the system has helped them see the results of complying with their diet, medications and activity.

Educating the community on the benefits of telemonitoring is the next step for Los Robles Homecare Services. Plassmeyer is working closely with local hospitals on the practice of telemonitoring and how this could provide for continuity of care. “Our intent is to offer community service seminars to teach patients how to self-manage their chronic conditions such as congestive heart failure or chronic obstructive pulmonary disease. We have found that when patients become active in self-management, they tend to live healthier life styles since they recognize through their own vital sign surveillance what affects their physical health.”

Although implementing a telemonitoring service can be costly to an agency, Plassmeyer thinks the long-term benefit is well worth the cost. “If an agency is looking at long term visibility in the community with a higher model of care, they have to invest in the telemonitoring program.” Plassmeyer stated. “People are living longer and the cost of health care is rising. Teaching patients how to monitor their own health status could definitely affect how they stay living healthy in their own home environment.”







Joan Buck-Plassmeyer, Los Robles Homecare Services, provided data in this article.

Think Telemonitoring...



for Patients at Risk for Hospitalization!

**Telemonitoring can reduce
avoidable hospitalizations by:**

-  Increasing symptom surveillance
-  Detecting early changes in health status
-  Improving patient self-management
-  Prompting patients to seek earlier medical attention
-  Providing real-time data to the physician
-  Creating opportunity for early interventions



Additional Resources

[American Telemedicine Association](http://www.americantelemed.org/)

www.americantelemed.org/



The Home Telehealth and Remote Monitoring Special Interest Group (SIG) supports the expansion and utilization of telehealth, remote monitoring and disease management applications in the patient's place of residence. This SIG sponsors tutorials, courses, educational workshops and seminars and a web page that provides important information and numerous documents and reports in support of this field.



[Telemedicine Information Exchange](http://tie.telemed.org/default.asp)

tie.telemed.org/default.asp

“An unbiased and all-inclusive platform for information on telemedicine and telehealth.” This includes information about practicing telehealth and telemedicine in each state. Also includes the status of licensure and reimbursement as well as active programs and relevant organizations.

[HRSA Health Resources and Service Administration](http://www.hrsa.gov/telehealth/)

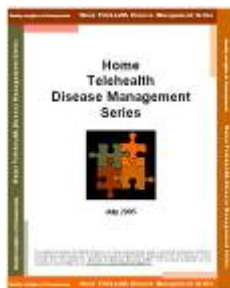
www.hrsa.gov/telehealth/



HRSA promotes the use of telehealth technologies by administering telehealth grant programs; providing technical assistance; developing telehealth policy initiatives to improve access to quality health services; promoting knowledge exchange about "best telehealth practices." The **Telehealth Grantee Directory** is located here.

[Home Telehealth Disease Management Series](http://www.medqic.org)

www.medqic.org



The Home Telehealth Disease Management Series provides clinicians with a package of tools to improve the management of heart failure, COPD, cancer, and diabetes through the incorporation of telehealth. Each disease topic includes **patient selection criteria**, **decision support tool**, **patient encounter documentation tool**, patient self-care workbook, and staff education guide including phone assessment guides.

Telemonitoring

Post-Test Answer Keys

Each track of the Best Practice Intervention Package has a post-test that providers may choose to complete after reviewing the track and completing the activities.

For the Telemonitoring package, the post-tests are found on the following pages:

Nurse Track – page 35

Therapy Track – page 45

Medical Social Work Track – page 57

Home Health Aide Track – page 63

Use the answer keys below to score the post-tests included with the **Best Practice Intervention Package - Telemonitoring**.

Nursing Post-Test Answers:

1. C
2. A
3. E
4. B
5. E

Therapy Post-Test Answers:

1. C
2. A
3. E
4. A
5. E

Medical Social Worker Post-Test Answers:

1. C
2. A
3. E
4. A
5. E

Home Health Aide Post-Test Answers:

1. A
2. D
3. E
4. A
5. E