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sense **and** simplicity

Health Care & Technology: The Wave of the Future
Health Care Cost Containment:
The Role of Remote Patient Monitoring

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Philips Remote Patient Monitoring

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NCSL
NATIONAL CONFERENCE of STATE LEGISLATURES

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Collectively, we have One Vision to fulfill

Philips Healthcare

- Imaging Systems
- Customer Services
- Healthcare Informatics
- Ultrasound & Monitoring Solutions
- Visicu (eICU)
- Home Healthcare Solutions

Philips Lighting

- Lamps
- Professional Luminaires & Systems
- Home Luminaires & Systems
- Lighting Electronics
- Automotive
- Solid State Modules
- Special Lighting Applications

Philips Consumer Lifestyle

- Domestic Appliances
- Health and Wellness
- Direct Life
- Shaving and Beauty
- Connected Displays
- Peripherals and Accessories
- Home Networks
- Video and Multimedia
- Audio and Multimedia
- Professional and Business Solutions

Examples of remote monitoring technology

Telehealth

Personal Emergency Response Service

Cardiac Monitoring Services

- Arrhythmia event monitoring

- ICD/Pacemaker monitoring

- INR@Home patient self-testing service

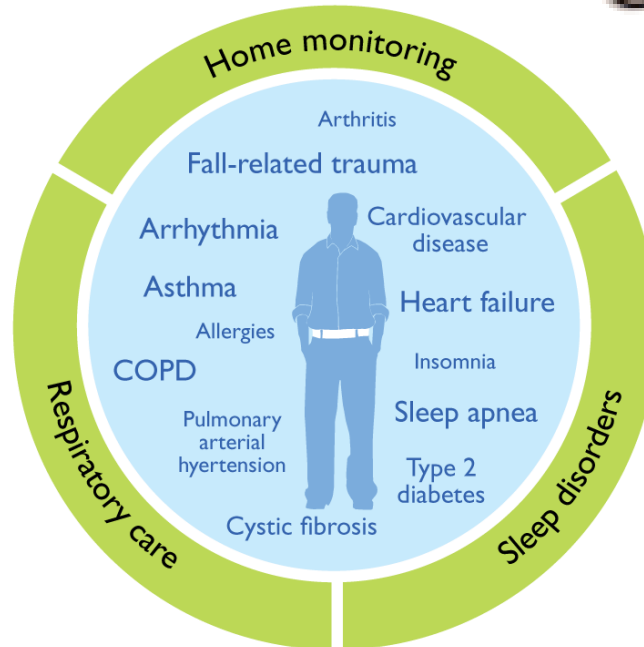Medication Dispensing Service

Home monitoring

Arthritis

Fall-related trauma

Arrhythmia

Cardiovascular disease

Asthma

Heart failure

Allergies

Insomnia

COPD

Pulmonary arterial hyertension

Sleep apnea

Type 2 diabetes

Cystic fibrosis

Respiratory care

Sleep disorders

Sleep Apnea and Respiratory Products

Why provide post-discharge remote patient monitoring?

- *Providers need to reduce re-hospitalizations and* improve clinical outcomes
    - Hospital industry, the national average for Medicare heart failure patients readmitted within 30 days post-discharge is 24.5%.
    - Home Care industry, the national average of Medicare patients readmitted to the hospital during a 60-day plan of care is 29%.

- *New federal payment methodologies are being evaluated and directly linked to performance and outcomes:*
    - Bundled Payment
    - Gain Sharing
    - Medical Home
    - Alternative Care Organizations (ACO's)
    - Independence at Home Act
    - New State initiatives
    - Incentives and Penalties will be prevalent

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Telehealth Pilot
State of Kansas
Preview

State of Kansas Telehealth Pilot

The study group consisted of 73 women and 15 men. Ages ranged from 65 to 96 years, with an average age of 79. Hypertension was the single most common diagnosis with 15 clients having this condition. Eleven people had congestive heart failure (CHF), followed by diabetes (9) and chronic obstructive pulmonary disorder (COPD; 4). The remaining 49 participants had multiple comorbidities of these four illnesses.

Variable	Baseline Mean	Intervention Mean	Significant Change?
Hospital Visits	1.7	1.6	No
Hospital Days	22.3	17.6	No
Hospital Costs	$60,253	$40,507	No
E.D. Visits	.52	.28	Yes
E.D. Costs	$3754	$1808	No
Total Costs	$94,535	$85,807	No

Table 1: Comparison of baseline and intervention mean rates of pilot variables.

Credit: Kansas HCBS Telehealth Pilot and Windsor Place (provider)

State of Kansas Telehealth Pilot

Item	Mean (On 1-4 scale)
This health monitoring technology improves my health care.	3.30
I would rather go to my doctor than use this technology.	2.04
This technology improves my life.	3.09
I am more involved in my health care as a result of this technology.	3.35
I do not trust this technology to help me with my health.	2.00
This technology will help me live in my home longer.	3.52
Using this technology has been a positive experience for me.	3.48
This technology is easy to use.	3.39
I am confident that this technology will help me if my health starts to decline.	3.30
I feel better able to manage my health care with use of this technology than I did before.	3.09
I have gone to my doctor at least once because of what I found out with the technology.	3.35
I would like to use this technology for as long as I can.	3.39

Table 3: Mean scores of perception items on 1 (strongly disagree) to 4 (strongly agree) Likert scale for Year 1 participants after 2 years of telehealth.

Credit: Kansas HCBS Telehealth Pilot and Windsor Place (provider)

State of Kansas Telehealth Pilot

- Current status

  - Legislation was passed to expand pilot to 500 patients in FY2011

  - One additional year to further validate initial findings

  - Statistical relevance is important to finalize findings

  - Cost savings are present and patient satisfaction is high

  - End result goal is demonstrate the effectiveness and appropriateness and approve reimbursement for remote patient monitoring

State of New York Telehealth Initiative
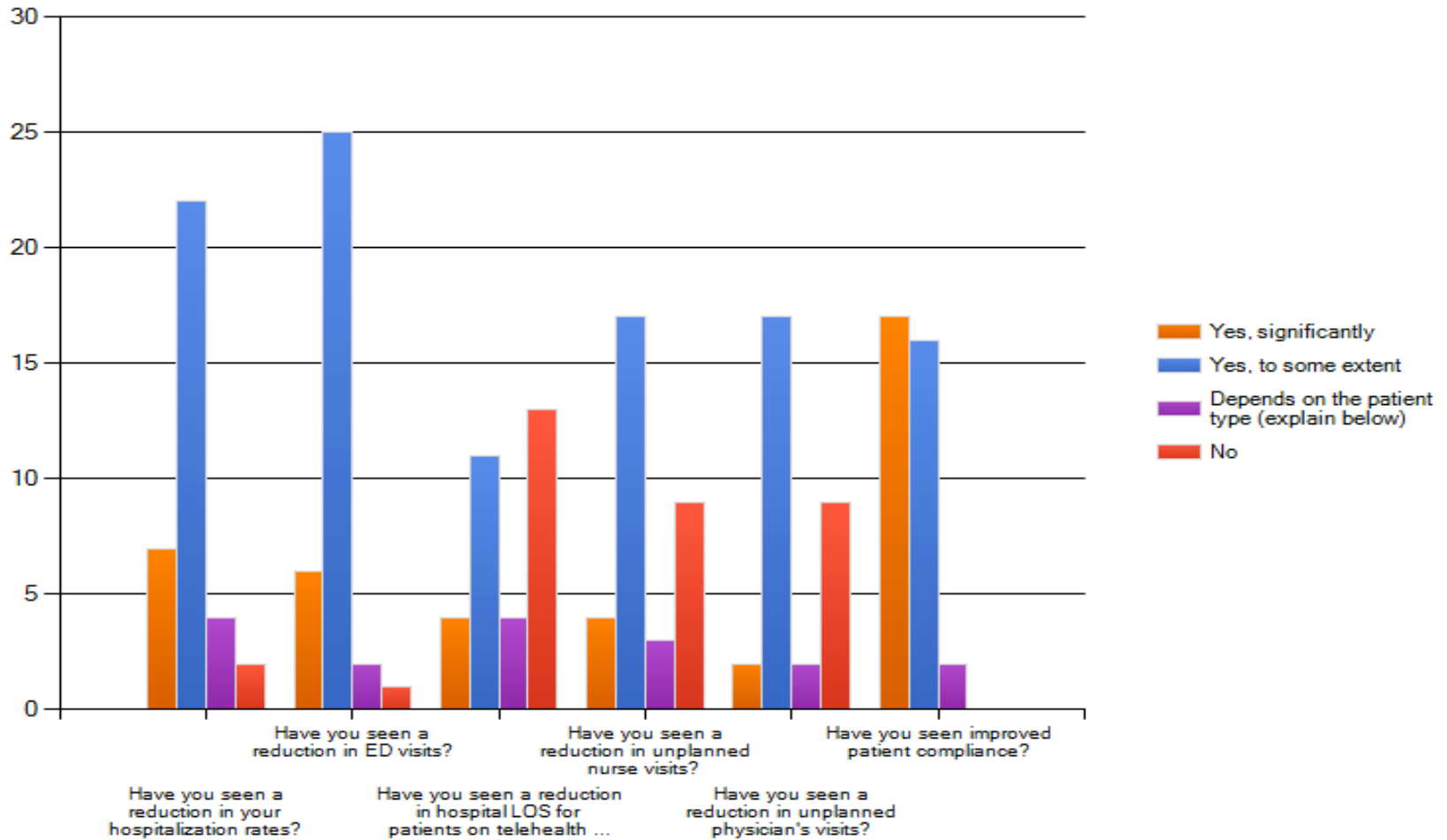
Credit: Home Care Association, New York State

Where is reimbursement today?

➢ **Personal Emergency Response Service**

  ➢ 40+ states

➢ **Medication Management**

  ➢ Less than 10 states…and growing
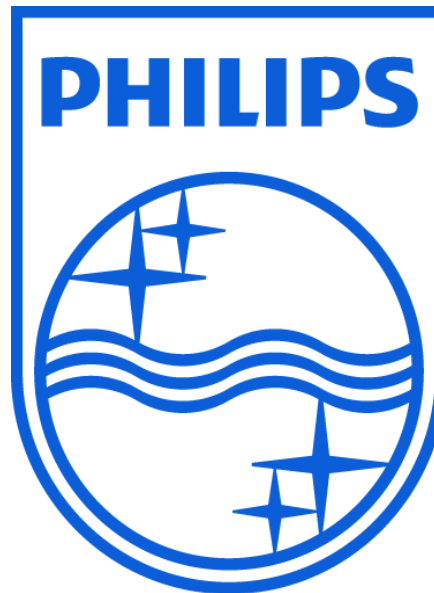
➢ **Remote Patient Monitoring**

  ➢ Less than 10 states…and growing

  ➢ Kansas and Massachusetts are in-process

Outcomes-Case Examples

- 10/28/09 **Banner Health System, Arizona** noted that they have provided remote patient monitoring services to patients with heart failure and other chronic diseases since 2006 including more than 550 patients in the past three years, achieving a readmission rate of 3.8 percent for patients on monitoring versus a state average of 21 and national average of 24%. *(press release, October 29, 2009)*.

- 01/29/10 **Sentara Health System**, **Virginia**, rated the top integrated hospital system by Modern Healthcare in January 2010, noted in a recent national presentation that they have been reducing hospital readmission rates by 70% or more when patients are remotely monitored in the home. Additional programs focus on "Hospital to Home" and ED models. *(World Health Congress, January 2009, National Home Care Association, July 2010)*

In Conclusion…….

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