Agenda

- Background and Goals
- Using the ADOPT Toolkit
- RPM Toolkit Applications
- ADOPT Toolkit in Practice
- Q&A
Today’s Presenters

David Lindeman, PhD
Director
Center for Technology and Aging

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Program Director
Center for Technology and Aging

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Senior Advisor
Center for Technology and Aging
The Center for Technology and Aging

- Center for Technology and Aging’s mission:
  To accelerate diffusion of proven technologies (“ADOPT”)
- National resource center on health technologies that promote better care, better outcomes, and lower costs for chronic disease management and the independence of older adults
- Conducted technology demonstration projects with over 100 US health care and aging services organizations
- Professional services, research and evaluation, information dissemination, and public policy
CTA Technology Demonstration Grants 2010-2012

- Medication Monitoring and Adherence
- Remote Patient Monitoring
- Technologies for Improving Post Acute Care Transitions
- Mobile Health Solutions
  - Improve efficiency of care delivery
  - Improve health outcomes
  - Reduce the cost of care
  - Improve chronic disease management
  - Increase the rate of adoption
The ADOPT Toolkit

- Aim is to help organizations quickly and effectively develop and scale technology-enabled solutions for chronic disease management (e.g., remote patient monitoring, mHealth)

- A collaboration between CTA, grantees, health care organizations, and experts

- Web-based toolkit for planning, development and implementation of technology-enabled solutions

- Consists of guides, practical examples and models, templates
Remote Patient Monitoring Toolkit Contributors

1. AltaMed Health Services
2. California Association for Health Services at Home
3. CalOptima
4. Centura Health at Home
5. Dignity Health
6. HealthCare Partners Institute
7. NEHI / Atrius Health
8. Sharp HealthCare
9. Veterans Administration (Central CA)
Acknowledgements
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- Background and Goals
- Using the ADOPT Toolkit
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- Q&A
Orientation to ADOPT Toolkit Website

- Toolkit Structure
  - Toolkit Focus Areas
  - Workstream Framework
- Access and Select Tools
- Review and Provide Feedback

toolkit.techandaging.org
ADOPT Toolkit Homepage

- Register to access tools
- Click on the About ADOPT tab for directions on how to use the toolkit website
- Access all 4 toolkits from the homepage
- Learn more about CTA and CTA services through the respective tabs
Toolkit Structure: Four Focus Areas

1. Remote Patient Monitoring Toolkit
2. mHealth Toolkit
3. Medication Optimization Toolkit
4. Care Transitions Toolkit
# 8 Workstreams

<table>
<thead>
<tr>
<th>Workstream</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Planning</td>
<td>Program Planning reviews program design and change management.</td>
</tr>
<tr>
<td>Technology Management</td>
<td>Technology Management covers technology review, technology selection and technology logistics.</td>
</tr>
<tr>
<td>Patient Management</td>
<td>Patient Management consists of patient selection, recruitment/enrollment, engagement and program discharge.</td>
</tr>
<tr>
<td>Clinical Management</td>
<td>Clinical Management addresses provider engagement and clinical processes.</td>
</tr>
<tr>
<td>Financial Management</td>
<td>Financial Management addresses budgeting and ROI Analysis.</td>
</tr>
<tr>
<td>Administration</td>
<td>Administration reviews contracting and compliance issues.</td>
</tr>
<tr>
<td>Marketing</td>
<td>Marketing covers program promotion and customer support.</td>
</tr>
</tbody>
</table>

- Workstreams are not sequential
- Program Team can self-select to workstreams they are interested in
RPM Program Planning

Program Planning reviews program design and change management.

Before downloading tools, read the Program Design Guide and Change Management Guide.

Sub-task

Making the Case for RPM - Example Presentation
Interactive Voice Recognition RPM Project Workplan - Example
SWOT Analysis – Template
Remote Patient Monitoring Program Description and Flowchart - Example
RPM Program Development Workplan - Example
Telehealth Standard Operating Procedure - Example
CHF Telemonitoring Program Development Checklist - Example
Logic Model – Template and Examples
RPM Program Development and Analysis Plan - Example

Tools

Download

Program Design

Individual Tool

Tools

Download

Change Management

Download all Workstream Tools in a Zip file

Download Guides First
Two Routes to Select Tools

Get Started

This toolkit will be complete in late September 2012. However, some tools and guides are available for download. Tools are organized under eight workstreams: functional areas that simplify the steps required to successfully deploy a technology. Workstreams are not sequential. They often overlap and segue into one another during the course of the deployment journey. Sub-tasks within workstreams further help you quickly find the right tool for the right task. More is on the workstream homepage.

Click ‘more/less’ next to each workstream for a list of guides and tools relating to that area. Each workstream and sub-task has a corresponding guide. Download the guides first prior to reviewing individual tools to obtain an overview and important considerations for implementing technology.

Click on the tool’s title to find more information about each tool, including their description, target audience, and helpful tips. Click on the ‘download tool’ icon to download the tool. (Note: You must be logged in to download tools.)

Starter Kit

A suggested “starter kit” set of RPM tools for organizations new to technology adoption would include these 7 tools:

- Telehealth Organizational Readiness Assessment
- RPM Vendor Selection RFI
- RPM Program Development and Analysis Plan
- RPM Staff Roles and Responsibilities
- Making the Case for RPM
- Remote Patient Monitoring Program Model Budget
- ROI of RPM calculator (Note: The web based tool will launch in late 2012)

RPM Toolkit Workstreams

Program Planning [More/Less]
Program Planning reviews program design and change management.

Technology Management [More/Less]
Technology Management covers technology review, technology selection and technology logistics.

any agency’s true ability to plan, execute, and continue to lead a telehealth program for chronically ill patients. The tool is invaluable, with focused and specific questions that allow a team to probe the organization’s real readiness to proceed, while identifying areas of specific strength and development needs in implementing a remote monitoring program for patients.”

— Wendy Everett, President of NEHI
RPM technologies help manage and monitor health conditions of older adults, particularly those with chronic illness, and people who have trouble accessing care. Includes standalone or integrated home monitoring devices and peripherals.

Top five targeted health conditions being monitored

- Heart failure 77.1 percent
- Diabetes 74.3 percent
- COPD 54.3 percent
- Medication adherence 54.3 percent
- Asthma 42.9 percent

(2011 Performance Benchmarks in Telehealth and Telemedicine)
Benefits of Remote Patient Monitoring

- Improve monitoring of patients between office visits and hospitalizations
- Change patient behavior
- Increase patient, caregiver, and clinician engagement
- Reduce ED and hospital visits
- Improve care management
- Provide patient education
- Improve patient and clinician satisfaction
Agenda

- Challenges in Today’s Health Care Ecosystem
- Using the ADOPT Toolkit
- RPM Toolkit Applications
- ADOPT Toolkit in Practice
- Q&A
Before Getting Started

Planning and Design

Managing Expectations

The Role of Technology

Executive Champion

Acting on Actionable Data

Operational Workflows

Ability to Scale

Patient and Provider Engagement
RPM Starter Kit

Starter Kit

A suggested “starter kit” set of RPM tools for organizations new to technology adoption would include these 7 tools:

- Telehealth Organizational Readiness Assessment
- RPM Vendor Selection RFI
- RPM Program Development and Analysis Plan
- RPM Staff Roles and Responsibilities
- Making the Case for RPM
- Remote Patient Monitoring Program Model Budget
- **ROI of RPM calculator** (Note: The web-based tool will launch in late 2012)
Addressing Challenges – 1

Organizations often do not sufficiently understand program goals, clinical focus, or operational capacity

**Question:** *How prepared are we to implement an RPM program? What will success look like?*

- **ADOPT Section:** Program Planning
- **Tool:** Telehealth Organizational Readiness Assessment
Example – “Readiness Assessment”

<table>
<thead>
<tr>
<th>Your organization...</th>
<th>Numeric Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Has aligned the goals of the telehealth program with the organization’s vision and mission.</td>
<td>3</td>
</tr>
<tr>
<td>2 Has a history of providing innovation leadership (strategic innovation).</td>
<td>3</td>
</tr>
<tr>
<td>3 Is willing to appoint an executive-level telehealth program sponsor.</td>
<td>3</td>
</tr>
<tr>
<td>4 Has senior leadership willing to support the success of the telehealth program.</td>
<td>3</td>
</tr>
<tr>
<td>Is willing to incorporate the results of the telehealth program in the incentive compensation of senior management from enabling departments.</td>
<td>3</td>
</tr>
<tr>
<td>6 Will assign a senior clinical resource person to the telehealth program.</td>
<td>3</td>
</tr>
<tr>
<td>7 Will assign a senior IT resource person to the telehealth program.</td>
<td>3</td>
</tr>
<tr>
<td>8 Will assign a dedicated program manager to the telehealth program.</td>
<td>3</td>
</tr>
<tr>
<td>9 Has a common understanding of the potential medical outcomes or benefits from implementing a telehealth program.</td>
<td>3</td>
</tr>
</tbody>
</table>
Example – “Readiness Assessment”

Estimated Overall Readiness
Average Total Score: 90
Percent of Single Item Scores of 2 or lower 0%

Your score
Average Total Score
90
Percent of Single Item Scores of 2 or lower
0%

Not Ready
Possible Ready
Ready

Not Ready: Your organization is not ready to implement a telehealth program. To improve readiness, address elements with a score of two or lower.

Possibly Ready: Your organization is possibly ready to implement a telehealth program. To increase the likelihood of success, address elements with a score of two or lower.

Ready: Your organization is ready to implement the telehealth program successfully.
Addressing Challenges – 2

Organizations often struggle with how to promote the program and engage all operational and management levels.

**Question:** How can I best communicate RPM general concepts and potential results?

- **ADOPT Section:** *Program Planning*
- **Tool:** *Making the Case for RPM*
Example – “Making the Case for RPM”
Addressing Challenges – 3

Organizations often struggle to fully anticipate all program related costs (one-time and recurring)

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**Question:** What are the initial program costs and what should I budget for next year?

- **ADOPT Section:** Financial Management
- **Tool:** Remote Patient Monitoring Program Model Budget
Example – “Program Model Budget”

<table>
<thead>
<tr>
<th>Description</th>
<th>PILOT 6 - 12 mo.</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management (FTE’s)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Site preparation/engineering services (if proposed)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Hardware installation</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Hardware delivery</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Hardware refurbishing</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Hardware reprogramming</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Software installation</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Software configuration/customization (ex. CHF, COPD, Diabetes programming)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Application and integration testing</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>System testing</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>System performance acceptance</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Production Implementation &amp; Support</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Post-implementation support of on site operations</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Call Center</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other - Specify</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Total Service</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$0.00</strong></td>
</tr>
</tbody>
</table>
Addressing Challenges – 4

Organizations often do not fully analyze the potential cost benefit

Question: What are the program costs and potential returns?

- ADOPT Section: Financial Management
- Tool: ROI Calculator
Example – “ROI Calculator”
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Focus: To reduce 30-day readmissions for heart failure patients using remote patient monitoring technology with the support of The Center for Technology and Aging and the San Diego Beacon Community

Goal Statement: Reduce 30-day readmissions by 30%. The RPM 30-day readmission rate was 10%, compared with a 20.7% rate for the reference group.

Patient Population: Underserved (Medi-Cal, Unfunded, County Medical Services) or Medicare Fee for Service patients at Sharp Grossmont Hospital (SGH) or Chula Vista Medical Center diagnosed with Class II or III stage heart failure with a reference group of similarly diagnosed patients, with the same payor mix who were not enrolled in the RPM program.

Intervention: Remote Patient Monitoring device used daily to measure weight and functional status via yes/no questions coupled with nurse education and health coaching which included at least two home visits.

30-Day Readmissions: Results for patients enrolled for at least 30 days (Sharp’s Baseline: @ 20%)

<table>
<thead>
<tr>
<th>Status</th>
<th>Readmits/ Total Pts</th>
<th>30-Day Readmit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dis-enrolled*</td>
<td>3 / 15</td>
<td>20%</td>
</tr>
<tr>
<td>Graduated:</td>
<td>5 / 65</td>
<td>7.8%</td>
</tr>
<tr>
<td>Overall:</td>
<td>8 / 80</td>
<td>10%</td>
</tr>
</tbody>
</table>

* Disenrollment reasons: Surgery, admit to SNF, moved out of region, worsening CHF, patient/family request, death, admit to hospice
Benefits of Toolkit

- Facilitates quick program start (from decision to enrolling first patient) – Allows project leaders to focus on intervention design rather than administrative work.

- Reliable documentation – Collateral comes from organizations that have a proven track record with patient satisfaction and patient care outcomes.

- Change Management Strategy – Sharing that program was designed using input/tools from successful projects will help with buy in from stakeholders.
Sharp RPM Example: Self-Care Heart Failure Index (SCHFI) – Patient Activation Survey

SCHFI Maintenance Score

Patient scores above 70% - indicative of self activation. 98% of patients scored above the target of 70% on the maintenance domain of the SCHFI survey after completing the program.

Lean Six Sigma Department
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CTA Services and Technical Assistance

Additional focus areas and tools for ADOPT Toolkit

- Technology for Care Transitions Late 2012
- mHealth Toolkit Early 2013

CTA services and technical assistance

- Technology Readiness Assessments
- Technology Implementation Planning & Evaluation
- Technology Learning Collaboratives

Contact: support@techandaging.org
ADOPT Toolkit - Q&A

Contact CTA:

support@techandaging.org

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