High Tech & High Touch
Solutions for Home care

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2014 A Wild Year So Far

- Federal Mandates and Health Care Reform
- ACO’s and Post Acute Care
- Workforce Issues
- Diversification Pressures

2013

You are here
Why Look at Technology?

- External factors and pressures
- Internal factors: Gain efficiencies and grab opportunities
- Changing landscape in our industry
- Need for expansion and diversification
- Success now and in the future

Adapt or Perish...
Where Are You?

- Health Care Reform
- Technology and ACO’s
- Data Collection Needs
- Diversity Staying Ahead of The Curve!

2015 Will Bring Health Care Reform
Health Care Reform Items To Look At…

- Chronic Care Management
- Data Collection
- ACO Partners and Post Acute Care Bundling

Chronic Care Management

- Reduce inpatient costs and readmit rates by providing consistent and reliable post-acute care transitions
- Optimize post-acute care processes and transitions from one level of care to the next
- Reduce unnecessary Emergency Department (ED) costs and utilization
Can You Track These Data Points?

- Compliance with medication management
- Compliance with weight management
- Reduce falls, watch for dyspnea and increased weight
- Activity level monitoring
- Compliance with diet

Operational Factors

Using Technology To Enhance Your Operation
Manage Agency Risk

Assess Your Risk

- What are my current operational risks?
  - Compliance with laws and regulation
  - Compliance with all of your OWN policies and procedures
  - Human Resource issues
    - Hiring: follow your own policy
    - Greivence process disciplinary process
    - Wage and hour issues
    - Unemployment Claim Management

- Monitoring Remote Staff
  - Worker Injury, theft, absences
  - Telephony and remote monitoring
Assess Your Risk

■ What are my current operational risks?

■ Monitoring Remote Staff
  ► Worker Injury
  ► Abuse and Neglect Issues
  ► Theft
  ► Absences
  ► Compliance with agency policies

Assess Your Risk

■ So Now What?

► Fix the most serious issues first
► Legal Issues
► Wage and Hour
► HR
► Policies

► How can technology help you today and in the future?
► Start with your staff…
Technology and Your Workforce

It is not your parent's workforce

You Hired a What?

The Workforce Generations

<table>
<thead>
<tr>
<th>Generation</th>
<th>Traditionalists</th>
<th>Boomers</th>
<th>Gen. Xers</th>
<th>Millennials</th>
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<td>43–51</td>
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<td>Baby Boomers</td>
<td>Xers</td>
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</table>
Expand Your Education & Technology Offerings

- On demand programs for education sessions
- Video live training programs so staff can watch anytime
- Reward innovation and technology

Using Technology For Staff Communication

- Use a high-tech suggestion box such as "Survey Monkey (surveymonkey.com)

  - How can we help do your job better?
  - How can we help with training?
  - What is the one class you want us to offer?
  - Do you like the scheduling system?
  - Do you like the scheduling process?
Telephony Technology

- Timekeeping compliance
- Sleep and meal period compliance
- Selling point for families and referrals
- Start by…Monitoring and evaluating your current system

Telephony

- Meet Required Regulations as timecard
- Increase Employee and Customer Satisfaction
- Improve basic business functions and efficiency!
Telephony

- Caregivers are required to clock in and out using the client’s home telephone, which confirms they are actually at the senior’s home as scheduled.

- A reliable messaging system makes communicating between care team members easy and efficient.

Using Telephony

- First, decide what telephony system you are going to use.
- Determine how it will integrate into your current system.
- Is it stand alone or a whole new system?
- How does it integrate into billing and payroll systems?
Telephony

✦ Set up specific parameters you want in the telephony system
✦ Alerts for missed clock in
✦ Late clock in
✦ Overtime alerts
✦ Hours per week alerts
✦ Work with your vendor to see reports you want to monitor

Telephony and Wage and Hour Compliance

✦ Overtime will be automatically calculated for:
  ✦ Any work above 8 hours in a given day
  ✦ Any work above 40 hours in a given week
  ✦ Any work done for more than XXX consecutive days in any given week

✦ Overtime Rates:
  ✦ Use regular rate of pay (average hourly rate for week) to determine pay rate for all overtime.
Telephony Reporting

RECEIVED: 1
SENT:
You are calling from the home of Ken
Press 1 if you are J, and you would like to update tasks or clock out.
Press the star key if your name was not mentioned and you would like to clock in manually
RECEIVED: 1
SENT:
Press 1 to review your tasks for this shift.
Press 2 to report the status for tasks.
Press 7 to record mileage.
Press 8 to leave a general comment or report a change in condition.
Press 9 to clock out of this shift.
RECEIVED: 2
SENT:
Did you
Motivate and Encourage?
Press 1 to mark the task as complete.
Press 2 to mark the task as incomplete.

Telephony Training

1. Clock In when you arrive at the home.
   A. The first thing to do when you arrive at the home of the client is to call our telephony number, which is (888)357-9157.
   B. Please remember to do this right when you arrive - don’t delay!
   C. By calling immediately upon arrival, you can be sure to be properly paid for all the time you are at the client’s home and the client will be billed correctly.
   D. If there is more than one shift for that day, you will be asked to choose the shift. For example:
      “We found several available shifts for Joe Smith.
       Press 1 if you are Jennifer Caregiver and are clocking in for the 10am shift.
       Press 2 if you are Ronald Caregiver and are clocking in for the 3am shift.”

       Practice: Call (888) 357-9157 to Clock In.
       Press the number of the shift with your name. You have been Clock ed In!
Telephony Training

✦ Consult your HR expert or attorney for exact language

✦ Determine process for non compliance with using telephony

✦ Determine process for disciplinary actions for late to shift / missed clock in

Reach Out With Technology

✦ The 78 mil boomers born between 1946 and 1964 are the healthiest wealthiest most educated and prosperous generation.

✦ 82 % of adults over 50 are members of online communities and they will spend 7 billion dollars on line this year

✦ Navigate Boomers study in 2009 and 2010
Technology Sells

■ Promote your agency in the community
■ Promote communication with other providers
■ Promote family communication
■ Promote your “ACO ready” company

Technology Sells

■ Data Driven agency
  • Monitor Falls
  • Unexpected hospital stays or ER visits
  • Medication compliance
■ Promote your “ACO ready” company
Upgrade Your Website

- Your Website is a 24/7 virtual business referral source
- Make sure your website is at the top of any Google search
- The first step is in having a website built to search engine friendly specifications

What is Our Tech Status Today?

- What are the standard technologies currently in use in home care?
Payroll Automation

- Can be done on your own through software like Quickbooks or Peachtree

- Alternatively many payroll services such as ADP who offer a web-based platform for entering your time ticket totals, they take the information and process the paychecks and/or direct deposit vouchers for you

Home Care Software

- Main Components:
  - Scheduling
  - Billing
  - Personnel
  - Paychecks
  - Financial database
  - Contact Resource Management
  - Telephony
Emerging Technologies in Home Care Software

- Physician portals
- Patient/Family/Employee portals
- Patient-facing apps
- HIPAA tools
- Remote Patient Monitoring
- RHIO~ Regional Health Information Organization

What is a RHIO?

- Regional Health Information Organization

  “A type of health information exchange organization (HIO) that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.” (U.S. Department of Health and Human Services, Health Resources and Services Administration)
RHIO in Arizona

Arizona Health-e Connection

The Network

Arizona Health Care Cost Containment System (AHCCCS)
Arizona Poison & Drug Information Center
Banner Health
Benson Hospital
Behavioral Health Information Network of Arizona
Blue Cross Blue Shield of AZ
Care1st
Cardiovascular Consultants
Carondelet Health Network
Casa Grande Regional Medical Center
Children’s Clinics (Tucson)
Copper Queen Community Hospital
District Medical Group (DMG Children’s Rehabilitative Services)
El Rio Community Health Center
Genesis Ob/Gyn
HealthChoice
HealthNet
LabCorp
Little Colorado Medical Center

Marana Health Center
Maricopa County
Maricopa Health Plan
Maricopa Integrated Health System
Mariposa Community Health Center
Northern Arizona Healthcare
Pima County Administration
Sonora Quest Laboratories
Springdale Village
Sunshine Pediatrics
Symphony of Mesa
Tuba City Regional Health Care Corp.
Tucson Medical Center
UnitedHealthcare
University of Arizona Health Plans (UA Health Plans)
Villa Maria Care Center
Wickenburg Regional Hospital
Yuma Regional Medical Center
Yuma Children’s Clinics

Current Total: 38
Medication Management Systems

- Most have compartment capacity up to 4/day for 7 days
- Senior receives audible and visual alerts if meds are not taken on time
- Communication by phone, text or email to Family/Agency
- Offer weekly compliance reports
- Real time web access

PERS Units
Medical Alert Systems

- Help button worn as a bracelet or necklace
- Programmed unit is set up with the landline phone in the home
- Call center responds by phone or speaker on the box when an emergency alert is activated, contacting EMS as needed
- Caregiver alerts are sent by phone, email and text

How Agencies Are Implementing PERS

- Some agencies just refer to a vendor
- Some agencies provide a unit & charge the client a monthly fee
- Some agencies will provide a unit free of charge when a threshold amount of care is purchased
Medical Alert Pricing

- Monthly cost per unit
- Key question ~ installed or on your shelf

Limitations

- Range has improved over time but sometimes unreliable
- Only helpful when the senior is at home
- Only helpful if the senior is near the button
Alerts For Bed Movement

- Bed Sensor Pads
  - Will alert caregiver if any movement toward getting out of bed
  - Ideal for clients who are a fall risk
  - Ideal for clients with a dementia like diagnosis
Alerts For Movement Out of Bed

- Bedside or Doorway Movement Mat
- Will alert caregiver if patient steps on mat getting OOB or OTD
- Helpful for clients who are a fall risk
- Ideal for clients with a dementia-like diagnosis, any wanderers

Telehealth

- A remotely operated system designed to allow vital health statistics to be obtained and transmitted remotely to health care providers
- May or may not incorporate a video camera
- Video camera may be one way with the patient video broadcast to the practitioners or two way where the patient and the practitioner can see each other
- Two way videos offer patient/caregiver teaching opportunities
What Information Does Telehealth Collect?

- Blood pressure
- Blood glucose
- Heart rate
- Pulse
- Weight
- Pulse oximetry

Common Uses

- Largely used by Medicare agencies to reduce staff visits while monitoring patient status, although not currently reimbursed by CMS
- Medicare reimbursements are paid by the episode, so fewer in-home nursing visits make for greater efficiencies
Telehealth in Private Duty

- Reimbursement
- Usage
- Vendor pricing
- Client Pricing
- Client value

The Next Big Thing

- What are the new technologies entering the health care realm?
Core Motion Technology

- Apple based, iPhone 5s or newer
- Motion co-processor chip, measures data from the phone’s accelerometer, gyroscope and compass
- The interface app developers use is called Core Motion

What Does it Mean for Home Care?

- This technology allows a user to tell if the individual is stationary, walking or even driving
Galaxy Gear Watch

- Similar technology without a phone
- Manufactured by Samsung

Announced September 2014

Apple Watch
And More On The Way

- Other players with similar devices on the horizon:

  Sony, Qualcomm

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Partners HealthCare of Boston

October 2013, launched a system that allows patients to upload information from their medical devices, often wirelessly, directly into their electronic records in Doctor’s offices.

- Glucometers
- Blood pressure cuffs
- Bathroom scales
- Pulse oximeters
Other Advances In Health Care Technology

✦ Eating habits
✦ Movements
✦ Sleep
✦ How we live…

Why Does This Matter To You?

✦ The use of these technologies allows you to promote your agency in a whole new light

✦ Cite these developments to show how your agency is on the cutting edge of emerging technologies
New Mobile PERS Options...

Mobile PERS Apps

- Nearly 70% of seniors now have cell phones
- Single click on app connects user to 24/7 monitoring center
- No need for additional device to carry and keep charged
- Utilizes GPS to locate senior
Smart Bed Sensor Mat

How Smart Bed Technology Works

The TLC sensor mat collects heart and breathing rate trends, motion, and presence data.

A continuous stream of data is wirelessly transmitted to the HIPAA-compliant TLC cloud platform for analysis.

Information and alerts are sent to PCs or mobile devices.
How Smart Bed Technology Addresses Problems

- **What it Records:**
  - Heart rate data and trends
  - Breathing rate data and trends
  - Motion
  - Sleep quality by monitoring duration, restlessness, heart and breathing rates
  - Scheduled patient turns
  - In-bed duration

- **Benefits:**
  - Monitoring vitals
  - Unobtrusive to Patient
  - Prevents Bed Sores
  - Prevents Patient Falls
  - Solid data to share with Health Practitioner

SAFEINHOME

- In-home monitoring system accessible remotely via a smart phone, tablet or computer
SAFEINHOME

- Alerts if home temperature varies from specified ranges
- Alert if the stovetop temperature exceeds normal cooking temperatures
- Allows remote monitoring via smart phone room to room movement, how many times patient gets up at night
- Passive monitoring, the senior doesn’t have to play a role
Point Of Care Devices

• Various devices allowing for the transmission of electronic medical health information
• Charting, Plan of Care updates, billing information done real time
• Smart phones and tablets, as well computer

BettyCare Screenshot
Attributes:

• Contains entire Plan of Care

• Plan of Care can be amended remotely and updated real time

• Caregiver charting

• Schedule available real time

• Telephony-like time sheet tracking

• Connects on 4G, no need for WiFi

• Allows approved family or guardians to portal in remotely via smartphone, tablet or computer

• Vendor, not the agency, provides the ipad

Example of Tablet Based

The Next HUGE Thing

• What are the radically new technologies entering the health care realm?
Medical Frontiers

- Diabetic monitoring on your iPhone
- Virtual colonoscopy
- Irhythm heart monitoring or Samsung Galaxy by fingerprint
- DNA information DCodeme.com 23andme.com

Google Glass

Recent Research points to a new and innovative way to assist those stricken with Parkinson’s Disease.
Google Glass Study

Where:
• Newcastle University in Newcastle, England,

What:
• Can Google Glass help Parkinson’s patients monitor their symptoms and be more mobile?

Google Glass

Promising Findings:
• Main focus—monitor symptoms. Small sensors in the computer could measure eye and head movement and alert users if they start to exhibit more symptoms so they can either take more medication or get to a safe place before more of their symptoms return and render them immobile.

• Early reports are positive for one scary symptom of Parkinson’s is that people can become “frozen” to the ground. Device allows them to call for help without being hindered by tremors.

• Patients reporting renewed confidence in going out and about in public alone.
Other Possible Benefits for the Elderly

- Sensors can track a person’s gait, and **identify mobility problems** that signal a potential fall. Early warning signs can trigger preventative treatments to stop a fall before it happens.

- **Reminders** for taking medication and preventing double dosing — a big health problem. Plus reminders of family birthdays, Dr.’s appointments and other events.

- **Recognition and Prompting**: Recognize family members and offer simple messages such as, “This is your son, his name is John. Say, “Hello John, how are my beautiful grandchildren?”

- **Memory Recall**: when John asks his aged mother, “Do you remember the trip we took last year to Las Vegas?” Google Glass can run a quick replay video of the highlights. Not only would John’s mother recall the trip but she could use John’s wireless printer to print out her favorite photos for him, right there and then.

- Long-distance sons and daughters can **check-in** with their parents very easily. With Google Glass-type devices, they can patch into what they are doing, even what they are seeing (with a “courtesy” filter to screen out any embarrassing scenes). Source: Silicon Valley Watcher

- More…

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**SoftBank Robotics Introduces “Pepper”**
Originally developed as a Companion for the elderly. Pepper has the unique ability to read and respond to emotions.

Pepper

• Cost?
• Where?
• When?
• Others?
• Limitations?
Powered Exoskeleton

AKA
- Powered armor
- Exoframe
- Exosuit

Hybrid Assistive Limb

Wearable Robot
- Augments body movement
- Increases user strength by up to ten times
- Currently in 150 facilities
- Global Safety Certification
Soft Exosuit

Titan Arm
Personal Drone

Touring the Garden
Will Technology Replace Homecare?

• Our Opinion…

So High Tech Is All Around US
But High Touch Makes the Difference
What’s Your Opinion?

• Thank you from Lucy & Brittnei

• Questions?