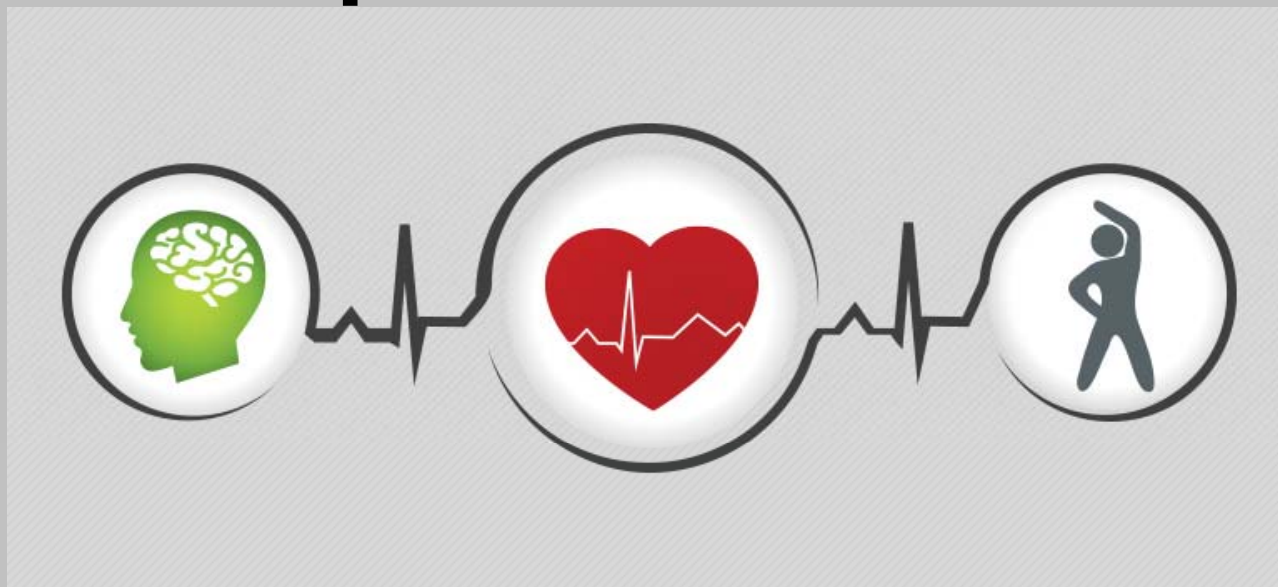


Finance, Management & Operations

LTC Policyholder Wellness and Claim Improvement Initiatives



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16th Annual Intercompany Long Term Care Insurance Conference

Agenda

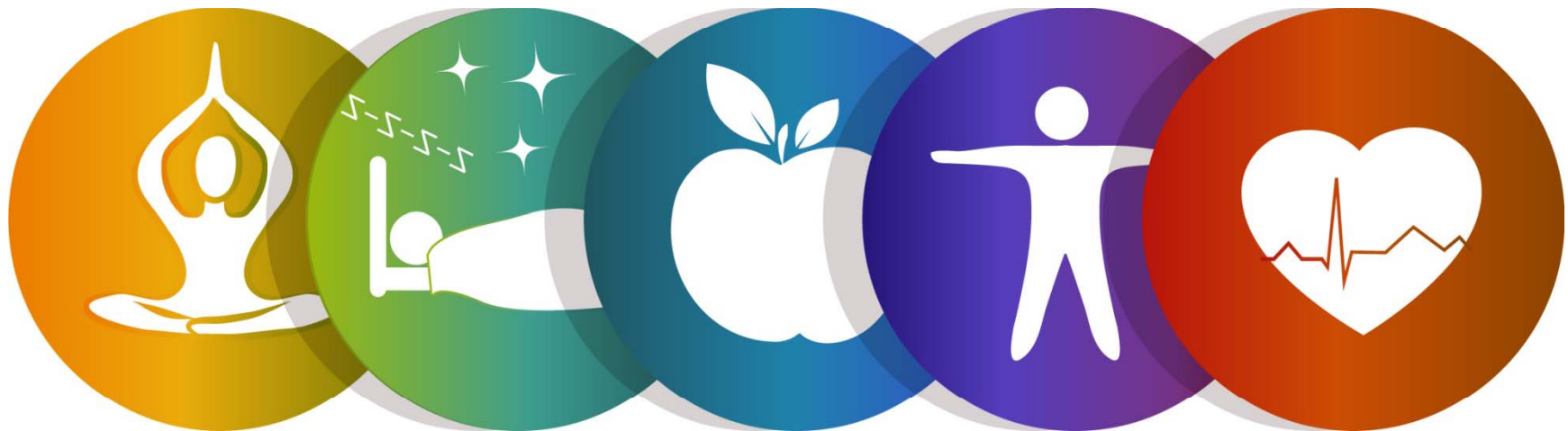


- Care Coordination
- Fall Prevention
- Cardiovascular Disease
- Dementia
- Q & A





Let's identify wellness initiatives that save claim dollars while promoting good health and creating positive customer experiences





- Several elements of a claim could be affected by a claim initiative:
 - Incidence
 - Termination rates (length of stay)
 - Utilization
 - Daily cost of the services
 - # of services used per week
 - Mix of services by care site
- Evaluating the impact can be difficult and take a long time

Methods Which Can be Used for Evaluation:



- Randomized control group
 - Two randomly-selected groups chosen
 - One gets claims change; the other doesn't
- Risk-profile matched control group
 - Same, except the two groups are chosen with attempt to make risk characteristics the same in the two groups
- Pre/post experiment comparison or predictive modeling





- Applies detailed statistics derived from past experience (on incidence rates, termination rates, utilization rates) to future exposures to predict number of future claims (separate by new vs. on-going)
- If derived statistics are sufficiently detailed, *and if there is no statistical deviation*:
 - The number of future claims = expected in the absence of claim initiative
 - OR
 - The change in the number of future claims would be due to the initiative

Care Coordination Services



- **Main Attributes:**
 - Helps determine specific care giving needs for older adults
 - Identifies available resources / services to meet those needs
 - Customer Education
- **Example Resources / Services:**
 - Community-based services:
 - Meals on Wheels
 - Local senior transportation services
 - Medicare and VA benefits
 - Therapy
 - HHC agencies and facilities
 - National Associations
 - Alzheimer's Association (Care Navigators)
 - National Association of Agency on Aging
 - Local agencies providing needed services



- **Chronic Disease Management**

- Educational Materials
- Resource Referrals
- Self Help Tools

- **Post Acute Services**

- New Disease Process
- Telenurse Program
- Resource Referrals
- Recovery Program



The goal is to meet the patients' needs and preferences, improve overall healthcare delivery and help conserve LTC Policy benefits.



- Care coordination could affect any or all of the elements of a claim
- Claim savings likely if the process:
 - Notifies claimant of free services not otherwise known
 - Helps person self-manage condition(s)
 - Enables shift from higher to lower cost medically appropriate care

The Controversy around Care Coordination...



- Nurses are often advocates for the patient
- Advocacy may result in higher incidence rates and/or longer lengths of stay if:
 - Paid services are recommended before the insured would have otherwise gotten them; or
 - More services are recommended than the insured would normally have used
- Each claim component must be closely monitored, along with combined effect of all
- Measurement must be done over a long period of time...how long depends on the size of your claim block



Cost of Falls¹

- **One third** of all people over 65 years old will fall in the next year
- Falls are the **leading cause of accidental death** in the age 65+ population
- One third who do fall sustain a **hip fracture**, which cost **\$12 billion** a year
- One half of those who fall and have an injury will require **nursing home** placement and half of those are still in a nursing home after one year



- Falls can be reduced by identifying risks and implementing interventions
- Experts² agree that exercise programs reduce the incidence of falls and more specifically can reduce injuries relating to a fall by up to 61%

Fall Prevention Program Elements



- Education
- Home Assessment
- Vision Screening
- Medication Review
- Osteoporosis Screen
- Diet and Exercise
 - Name brand programs
 - Local Discounts
 - Home Programs
 - Access to online live or recorded programs



Evaluation of a Falls Prevention Program



- Primary impact on incidence
- Residual impact on length of stay (termination rates)
- Does company's system track the primary condition which caused a claim?
- Does it uniquely identify "falls" (vs. "broken hip", for example)?
- Credibility likely an issue in measuring impact of a fall prevention program

Key is to Compare Cost of Program vs. Results



- Some programs, while likely beneficial, may be too costly or impossible to apply to everyone – e.g., diet and exercise programs.
- Voluntary programs are of less value.
- Focus on those at highest risk...how do you identify them?
- If cost can be kept moderate (e.g., education via newsletter or focused home assessments), program may be able to pay for itself...but credibility will be still a challenge in the measurement.

Cardiovascular Disease



- Cardiovascular disease (“heart disease”) includes numerous problems, many of which are related to a process called atherosclerosis
- Atherosclerosis is a condition that develops when plaque builds up in the walls of the arteries
- This buildup narrows the arteries, making it harder for blood to flow through them, often resulting in heart attack or stroke
- The key to preventing heart disease is identifying and managing risk factors

Cost of Cardiovascular Disease



- Leading killer in the United States for both sexes.³
- Accounts for over 19% of LTC claims (stroke alone is over 12%).⁴
- About half of all Americans (47%) have at least one of the three key risk factors for heart disease: high blood pressure, high cholesterol or smoking³
- High blood pressure, diabetes and high cholesterol increase the risk of developing Alzheimer's.⁵

Cardiovascular Disease Risk Factors



- Chronic Health Conditions **(Manage)**
 - *High blood pressure*
 - *Diabetes*
 - *High Cholesterol*
 - *Obesity*
- Behaviors **(Change)**
 - *Inactivity*
 - *Excessive alcohol use*
 - *Smoking*
 - *Diet*
- Other Factors **(Live With)**
 - *Heredity*
 - *Sex*
 - *Age*
 - *Ethnicity*



But wait! There's hope.....

Research suggests that identifying asymptomatic individuals at risk early and targeting them for aggressive risk factor modification can reduce disability and death from heart attack and stroke by 50%.⁶

What Can We Do?



- Diet and Exercise
 - Free or discounted fitness programs
 - Name Brand Programs
 - Local discounts
 - Home programs
 - Access to online programs
 - Nutrition Management
 - Smoking cessation
- Health Screenings
 - Screening Services
 - Incentives



- Similar to falls, except that people at risk are more easily targeted
- Early detection and prevention are likely to impact length of claim and distribution by care site
- But primary impact is still on timing of incidence rates...interventions are expected to delay, not eliminate, claims

Cost of Identification Becomes Important



- If identification is at time of initial underwriting or through regular self-reported questionnaires or screenings, savings can be material
- To entice participation, a “carrot” approach, such as a premium discount, is probably needed
- Measuring the impact then must compare the cost of the initiative, *plus* the cost of the “carrot” provided, to the savings



- Need to know the incidence of cardiovascular disease in the population before the initiative
- Incidence varies by gender and age
- Measuring impact will take longer than for falls, since it's likely that the claim will be delayed, rather than permanently eliminated.

Alzheimer's Disease and Dementia



- High blood pressure, diabetes and high cholesterol increase the risk of developing Alzheimer's Disease.⁵
- As many as 80% of individuals with Alzheimer's Disease also have cardiovascular disease.⁵
- 80% of dementia patient caregivers are family members in home settings.⁹
- Alzheimer's Disease and related dementias are the longest lasting, most prevalent LTC claim, making up greater than 37% of LTC claims paid. ⁴

Key Facts about Alzheimer's Disease



- In 2013, ~5 million Americans had Alzheimer's Disease. By 2050, the prevalence is expected to triple.⁷
- Alzheimer's Disease is now the 6th leading cause of death.⁸
- Aging is the best known risk factor for developing Alzheimer's Disease.⁷
- The likelihood of developing Alzheimer's Disease doubles about every five years after age 65.⁵



The Alzheimer's Association Believes:

- There is sufficient evidence to support link between several risk factors with risk of cognitive decline and dementia.
- Both regular physical activity and management of cardiovascular risk factors (diabetes, obesity, smoking, and hypertension) reduce the risk of cognitive decline.
- Healthy diet and lifelong learning/cognitive training will reduce the risk of cognitive decline.

What Can We Do?



- Increase early identification of Alzheimer's Disease and other dementia
 - Free screenings offered by groups such as the Alzheimer's Association
 - Self screening tools
- Benefits of early intervention
 - Medications (often more effective in those with mild to moderate dementia)
 - Lifestyle changes
 - Family preparation
 - Early onset genetic mutation
 - Social connections



What Can We Do?



- Care Coordination
 - Resource referrals
 - Family caregiver support
 - Help Line
- Diet and exercise
 - Free or discounted fitness program memberships
 - Brain fitness
 - Purchased programs
 - Free apps
 - Free brain training book



Evaluating Cognitive Initiatives



- Greatest benefit is delay of claim start, resulting in lower incidence rates and shorter claim lengths.
- Shifts from NH to ALF or HHC can have positive cost impact.
- Interventions used for cardiovascular claims can impact dementia claims.
- But will dementia initiatives actually invite earlier submission of Alzheimer's claims?



- Education by Care Coordinator is possibly the most cost-effective initiative
 - Provide care options (e.g. Adult Day Care)
 - Caregiver Training
 - Caregiver Support Services
- Early intervention is important
 - Prescribing medication while dementia is still “mild” or “moderate”
 - But, again, will this invite earlier dementia claim submissions?



- May have some impact but also some cost
- Mandatory vs. voluntary
 - Voluntary may not have much more impact than good education, since those who choose to do the test are self-selecting
- Do not compare cognitive claims in a population which uses an application to population which doesn't
 - The two groups have different underlying risks



- All the elements of a claim may be impacted, so measurement is complex:
 - Incidence rates may be reduced (or delayed)
 - Termination rates may be increased
 - Cost of care may be reduced
 - Mix of claims by care site may change
- Early indicators of success might therefore need to be measured by claim anecdotes.

Summary - Hypothetical Example



Hypothetical cardiovascular claim initiative:		
# of policyholders		100,000
Annual claim incidence before initiative		5%
Proportion of claims due to cardiovascular		19%
Expected # of cardiovascular claims, before initiative		950
Expected improvement in # of cardiovascular claims*		50%
Expected # of cardiovascular claims, after initiative		475
Dollar cost savings, assuming \$150/day for two years	\$	52,012,500
Dollar cost savings per insured	\$	520
Annual cost of claim initiative, including "carrot" cost		??
*Per International Union of Angiology Conference estimate		

Hypothetical Example (cont.)



- Above table reflects a $\frac{1}{2}$ percentage point drop in incidence rates.
- How big of a claim block is needed to credibly measure the impact of this small of a drop in incidence?
- With 950 expected claims, you can be 90% confident that your savings are within 5% of the “true” amount.



- Claim initiatives have potential for reducing the cost of claims
- Measuring the impact must take into account the cost of the initiatives, along with the cost of any “carrots” applied, vs. changes in the various claim components *over time*
- Due to credibility concerns, it’s rare that a quick evaluation can be made

Holistic Approach



- Common Themes

- Exercise

- Health screenings

- Care Coordination

- Education

A holistic approach to wellness initiatives will allow an Insurer to Implement programs that impact multiple claim types and promote health habits that reduce risk factors related to the most common Long-Term care diagnoses



Questions?



Resources



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- 2. Harvard Medical School along with the American Academy of Orthopedic Surgeons, The CDC, The National Safety Council and the National Osteoporosis Society
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- 4. Society of Actuaries' LTC Intercompany Experience Report 1984-2007
- 5. Alzheimer's and dementia. (n.d.). Retrieved December 29, 2015, from Alzheimer's Association website: http://www.alz.org/alzheimers_disease_causes_risk_factors.asp
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- 7. Hebert LE, Weuve J, Scherr PA, Evans DL. Alzheimer disease in the United States (2010–2050) estimated using the 2010 census. *Neurology*. 2013;80:1778-83.
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