What's in a hand

Identity

Unique

Multifaceted

Strength

Giving

Expertise

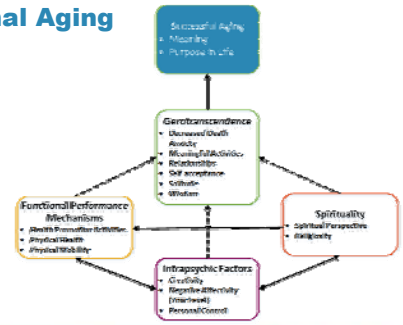
Value

Help

Future

Assumptions

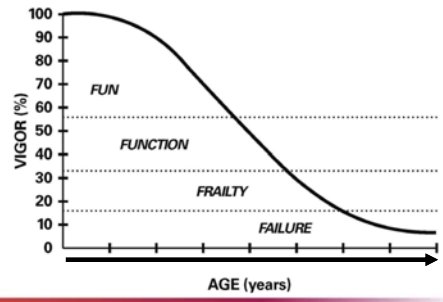
Optimal Aging



Successful aging theory . Adapted from Flood (2005)

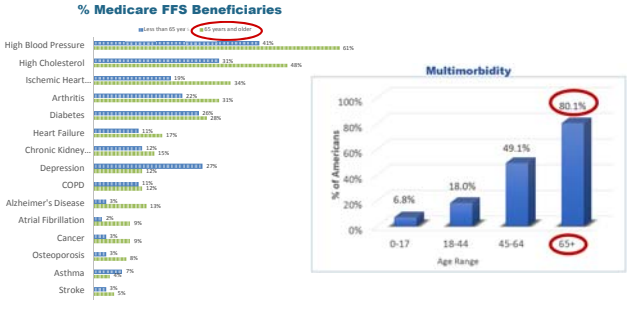
Kindred at Home

Optimal Aging?

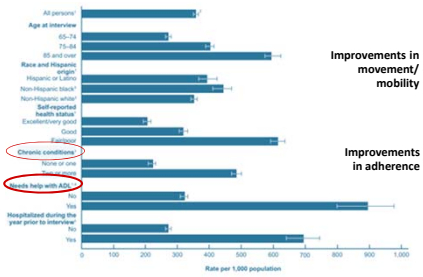


Kindred at Home

Adults ≥ 65 years



Hospitalizations: FFS Medicare Beneficiaries ≥ 65 yrs



Improvements in movement/ mobility

- Reduces risk of complications that would otherwise require additional health care services

Improvements in adherence

- Improves patient safety, leads to better health outcomes and decreases healthcare costs.

Population aged 65 and over using data from a national survey of the noninstitutionalized population linked to Medicare data and the National Death Index.

Yes, OPTIMAL Aging!

Live a Life

Form a Habit

VOICE

Kindred at Home

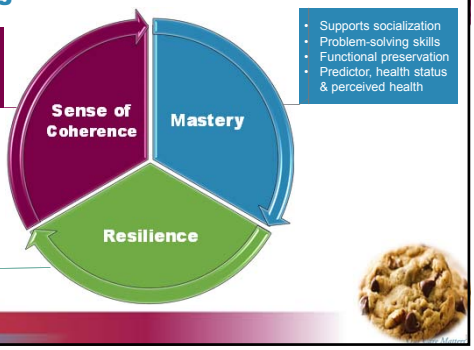
Being Identity

Doing Engagement

Determination

Optimal Aging

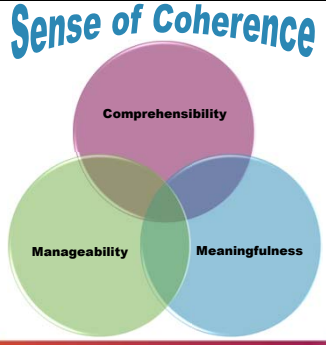
- Cognitive function
- ↓ physical disability
- ↑ locus of control
- Associated with resilience

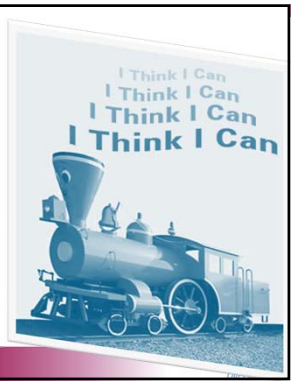


- Supports socialization
- Problem-solving skills
- Functional preservation
- Predictor, health status & perceived health

- Ability to adjust / recover
- Thrive when challenged
- ↑ ADLs; ↓depression
- + self-rating of health
- ↑ locus of control

Sense of Coherence





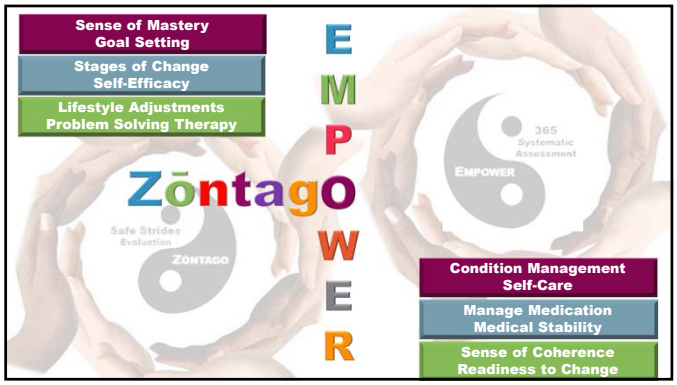
Sense of Coherence

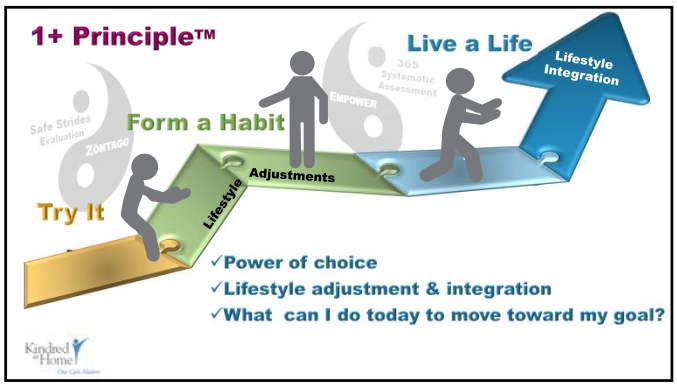
Resilience | Mastery

"Hidden Courage"

Mirian & Norbert

Shared Goals | Skilled Need
Non-adherence to Medication
Changes in Health Status
New or Exacerbated Diagnosis
Functional Decline
Medication Changes Causing Adverse Reaction
Fall Risk
Lab Draws Required
Post-hospital Assessment & Teaching Required
Promote Independence & VOICE
SHARED GOALS
Promote Engagement & Well Being
Kindred at Home


Sense of Mastery
Goal Setting
Stages of Change
Self-Efficacy
Lifestyle Adjustments
Problem Solving Therapy
Zōntago
E
M
P
O
W
E
R
Condition Management
Self-Care
Manage Medication
Medical Stability
Sense of Coherence
Readiness to Change


1+ Principle™
Live a Life
Lifestyle Integration
Form a Habit
Adjustments
Lifestyle
Try It
✓Power of choice
✓Lifestyle adjustment & integration
✓What can I do today to move toward my goal?
Kindred at Home

Video

Kindred at Home

What's in a hand

Action

Leadership = Action

What's in our *hands*

Purpose

Care

Trust

Experience

Expertise

Navigate

Celebrate

What's in your hands

Power

Reach out

Raise up

Rally forward

What's in a hand

Our hands

Your hands

Better

The Future is Now

Select References

- Campbell AJ et al. BMJ 1997;315:1065-1069; Campbell AJ et al. Age Ageing 1999;28:513-518.
- Trial 2: Campbell AJ et al. J Am Geriatr Soc 1999; 47:850-853.
- Trial 3: Robertson MC et al. BMJ 2001;322: 697-701.
- Trial 4: Robertson MC et al. BMJ 2001;322: 701-704.
- Process and impact evaluation: Gardner MM et al. Prev Med 2002;34:546-553.
- Meta-analysis of the four trials: Robertson MC et al. J Am Geriatr Soc 2002;50:905-911.
- "How to do it": Gardner MM et al. Age Ageing 2001;30:77-83.

Select References

1. Campbell AJ, Borrie MJ, Spears GF. Risk factors for falls in a community-based prospective study of people 70 years and older. *J Gerontol Med Sci* 1989;44:M112-117.
2. Tinetti ME, Speechley M, Ginter SF. Risk factors for falls among elderly persons living in the community. *N Engl J Med* 1988;319:1701-1707.
3. Alexander BH, Rivara FP, Wolf ME. The cost and frequency of hospitalization for fall-related injuries in older adults. *Am J Public Health* 1992;82(7):1020-1023.
4. Tinetti ME, Williams CS. Falls, injuries due to falls, and the risk of admission to a nursing home. *N Engl J Med* 1997;337:1279-1284.
5. US Department of Health and Human Services. *Physical activity and health: a report of the Surgeon General*. Atlanta, Georgia: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
6. Singh NA, Clements KM, Fiatarone MA. A randomized controlled trial of the effect of exercise on sleep. *Sleep* 1997;20:95-101.
7. Singh NA, Clements KM, Fiatarone MA. A randomized controlled trial of progressive resistance training in depressed elders. *J Gerontol Med Sci* 1997;52A(1):M27-35.
8. Campbell AJ, Robertson MC, Gardner MM, Norton RN, Tilyard MW, Buchner DM. Randomised controlled trial of a general practice programme of home based exercise to prevent falls in elderly women. *BMJ* 1997;315:1065-1069.
9. Campbell AJ, Robertson MC, Gardner MM, Norton RN, Buchner DM. Falls prevention over 2 years: a randomized controlled trial in women 80 years and older. *Age Ageing* 1999;28:513-518.

Select References

10. Campbell AJ, Robertson MC, Gardner MM, Norton RN, Buchner DM. Psychotropic medication withdrawal and a home-based exercise program to prevent falls: a randomized, controlled trial. *J Am Geriatr Soc* 1999;47:850-853.

11. Robertson MC, Devlin N, Gardner MM, Campbell AJ. Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 1: Randomised controlled trial. *BMJ* 2001;322:697-701 (see longer web version for details of the cost effectiveness analysis).

12. Robertson MC, Gardner MM, Devlin N, McGee R, Campbell AJ. Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 2: Controlled trial in multiple centres. *BMJ* 2001;322:701-704 (see longer web version for details of the cost effectiveness analysis).

13. Gardner MM, Robertson MC, McGee R, Campbell AJ. Application of a falls prevention program for older people to primary care practice. *Prev Med* 2002;34:546-553.

14. Robertson MC, Devlin N, Scuffham P, Gardner MM, Buchner DM, Campbell AJ. Economic evaluation of a community based exercise programme to prevent falls. *J Epidemiol Community Health* 2001;55:600-606.

15. Robertson MC, Campbell AJ, Gardner MM, Devlin N. Preventing injuries in older people by preventing falls: a meta-analysis of individual-level data. *J Am Geriatr Soc* 2002;50:905-911.

16. Gillespie LD, Gillespie WJ, Robertson MC, Cumming R, Lamb SE, Rowe BH. *Interventions for preventing falls in elderly people (Cochrane review). The Cochrane Library, Issue 3, 2001.* Oxford: Update Software, 2001.

17. Gardner MM, Buchner DM, Robertson MC, Campbell AJ. Practical implementation of an exercise-based falls prevention programme. *Age Ageing* 2001;30:77-83.

Select References

- AGS, BGS, & AAOS. (2001). Guideline for the prevention of falls in older persons. American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. *J Am Geriatr Soc, 49*(5), 664-672.
- Asslander, L., & Peterka, R. J. (2014). Sensory reweighting dynamics in human postural control. *J Neurophysiol, 111*(9), 1852-1864. doi: 10.1152/jn.00669.2013
- Brach, J. S., Van Swearingen, J. M., Perera, S., Wert, D. M., & Studenski, S. (2013). Motor learning versus standard walking exercise in older adults with subclinical gait dysfunction: a randomized clinical trial. *J Am Geriatr Soc, 61*(11), 1879-1886. doi: 10.1111/jgs.12506
- Brach, J. S., & Vanswearingen, J. M. (2013). Interventions to Improve Walking in Older Adults. *Curr Transl Geriatr Exp Gerontol Rep, 2*(4). doi: 10.1007/s13670-013-0059-0
- Campbell, A. J., & Robertson, M. C. (2013). Fall prevention: single or multiple interventions? Single interventions for fall prevention. *J Am Geriatr Soc, 61*(2), 281-284; discussion 286-287. doi: 10.1111/jgs.12095_2
- Campbell, A. J., Robertson, M. C., & Gardner, M. M. (1995). Elderly people who fall: identifying and managing the causes. *Br J Hosp Med, 54*(10), 520-523.
- Campbell, A. J., Robertson, M. C., Gardner, M. M., Norton, R. N., & Buchner, D. M. (1999). Falls prevention over 2 years: a randomized controlled trial in women 80 years and older. *Age Ageing, 28*(6), 513-518.
- Campbell, A. J., Spears, G. F., & Borrie, M. J. (1990). Examination by logistic regression modelling of the variables which increase the relative risk of elderly women falling compared to elderly men. *J Clin Epidemiol, 43*(12), 1415-1420.
- CDC. (2010). Centers for Disease Control and Prevention. Falls among older adults: an overview. 2010, from http://www.cdc.gov.HormeanRecreationalSafety/Falls/adultfalls.html.
- CDC. (2013). Centers for Disease Control and Prevention: Costs of Falls Among Older Adults Retrieved 11/14/2013, 2013, from http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallscost.html
- Cramer, S. C., Sur, M., Dobkin, B. H., O'Brien, C., Sanger, T. D., Trojanowski, J. Q., . . . Vinogradov, S. (2011). Harnessing neuroplasticity for clinical applications. *Brain, 134*(Pt 6), 1591-1609. doi: 10.1093/brain/awr039

Select References

- Diehr, P. H., Thielke, S. M., Newman, A. B., Hirsch, C., & Tracy, R. (2013). Decline in health for older adults: five-year change in 13 key measures of standardized health. *J Gerontol A Biol Sci Med Sci, 68*(9), 1059-1067. doi: 10.1093/gerona/glt038
- Dromerick, A. W., Lum, P. S., & Hidler, J. (2006). Activity-based therapies. *NeuroRx, 3*(4), 428-438. doi: 10.1016/j.nurx.2006.07.004
- Duncan, P. W., Sullivan, K. J., Behrman, A. L., Azen, S. P., Wu, S. S., Nadeau, S. E., . . . Hayden, S. K. (2011). Body-weight-supported treadmill rehabilitation after stroke. *N Engl J Med, 364*(21), 2026-2036. doi: 10.1056/NEJMoa1010790
- Farag, I., Howard, K., Hayes, A. J., Ferreira, M. L., Lord, S. R., Close, J. T., . . . Sherrington, C. (2015). Cost-effectiveness of a Home-Exercise Program Among Older People After Hospitalization. *J Am Med Dir Assoc*. doi: 10.1016/j.jamda.2015.01.075
- Goh, H. T., Gordon, J., Sullivan, K. J., & Winstein, C. J. (2014). Evaluation of attentional demands during motor learning: validity of a dual-task probe paradigm. *J Mot Behav, 46*(2), 95-105. doi: 10.1080/00222895.2013.868337
- Huber, J. G., Silick, J., & Skarakis-Doyle, E. (2010). Personal perception and personal factors: incorporating health-related quality of life into the International Classification of Functioning, Disability and Health. *Disabil Rehabil, 32*(23), 1955-1965. doi: 10.3109/09638281003797414
- Jette, D. U., Warren, R. L., & Wirtalla, C. (2005). The relation between therapy intensity and outcomes of rehabilitation in skilled nursing facilities. *Arch Phys Med Rehabil, 86*(3), 373-379. doi: 10.1016/j.apmr.2004.10.018
- Kleim, J. A., & Jones, T. A. (2008). Principles of experience-dependent neural plasticity: implications for rehabilitation after brain damage. *J Speech Lang Hear Res, 51*(1), S225-239. doi: 10.1044/1092-4388(2008/018)
- Kwon, Y. H., Kwon, J. W., & Lee, M. H. (2015). Effectiveness of motor sequential learning according to practice schedules in healthy adults; distributed practice versus massed practice. *J Phys Ther Sci, 27*(3), 769-772. doi: 10.1589/jpts.27.769
- Nadeau, S. E., Wu, S. S., Dobkin, B. H., Azen, S. P., Rose, D. K., Tilson, J. K., . . . Duncan, P. W. (2013). Effects of task-specific and impairment-based training compared with usual care on functional walking ability after inpatient stroke rehabilitation: LEAPS Trial. *Neurorehabil Neural Repair, 27*(4), 370-380. doi: 10.1177/1545968313481284
- Nudo, R. J. (2003). Adaptive plasticity in motor cortex: implications for rehabilitation after brain injury. *J Rehabil Med*(41 Suppl), 7-10.

Select References

- Guralnik JM, Simonsick EM, Ferrucci L, Glynn RJ, Berkman LF, Blazer DG, et al. A short physical performance battery assessing lower extremity function: association with selfreported disability and prediction of mortality and nursing home admission. *J Gerontol Med Sci* 1994;49:M85-94.
- Rossiter-Fornoff JE, Wolf SL, Wolfson LI, Buchner DM, and the FICSIT Group. A cross-sectional validation study of the FICSIT common data base static balance measures. *J Gerontol Med Sci* 1995;50A:M291-297.