



LIVING CONCEPTS IN LONGTERM CARE FOR PATIENTS WITH DEMENTIA

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OVERVIEW

Long term care definition,

How could we take care of patients with dementia?

We fight for quality of life improvement (not to only prolonge health),

Current situation vs. Future,

Economical costs of dementia for healthcare system,

Technology facilities for dementia patients.

LONG TERM CARE

- Definition: Services that are design to meet person's health or personal care needs
- Focus: People with disabilities
- Objective: Help people to live as independently and safely as possible with personal care and community services

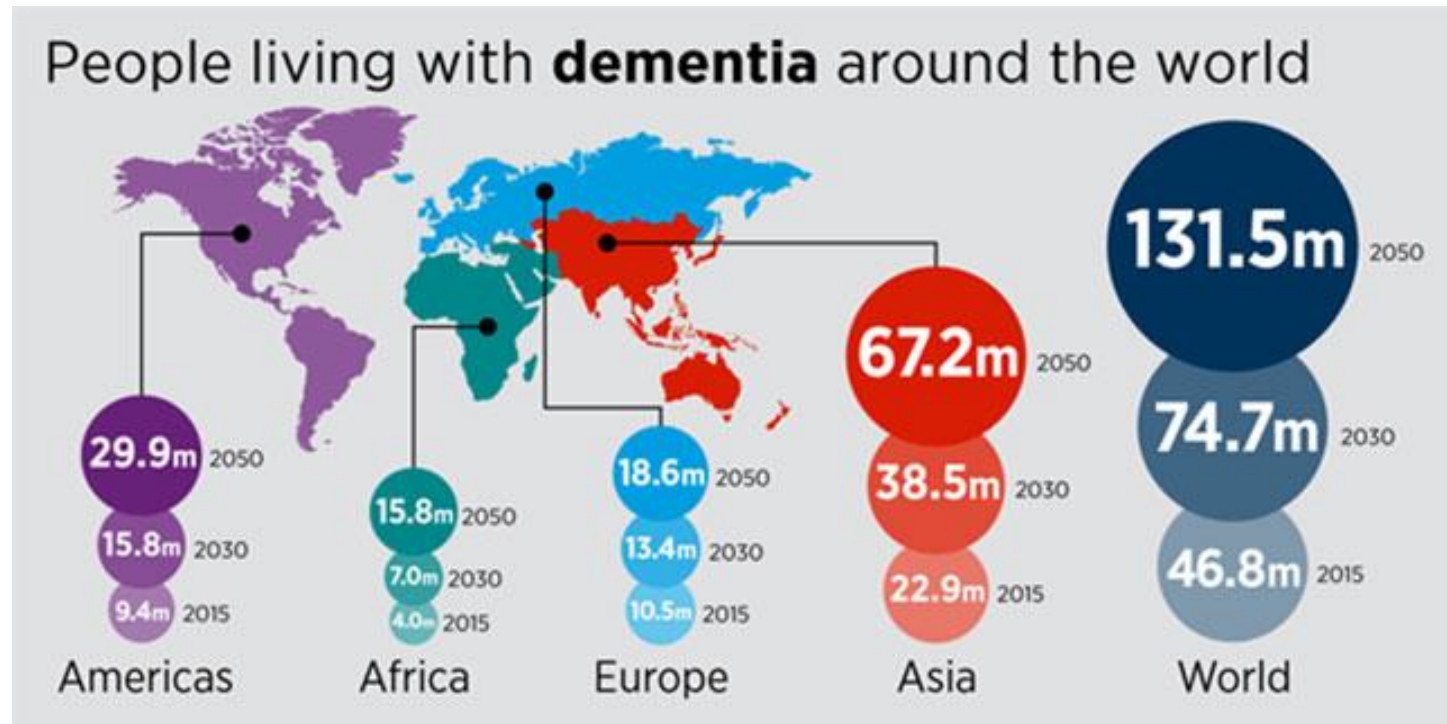


It can be provided as home care or in nursing homes or community centres.

DEMENTIA

- Dementia is one of the major cause of disability and dependence worldwide,
- Involves not only the patient, but also your family and caregivers,
- It is fundamental to recognize the capacity in persons with dementia,
- Protect the right to appropriate autonomy and self-determination, including substitute or supported decision-making.

DEMENTIA AS GLOBAL HEALTH PROBLEM



<http://pilatesfitness.co.uk/blog/?p=548>,
Posted on September 14, 2016

DEMENTIA AS GLOBAL HEALTH PROBLEM

World Health Association (2015)

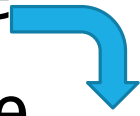
- 47.5 million people are estimated to be living with dementia
- 7.7 million new cases of dementia each year
- **Projections:**
 - 75.6 million in 2030
 - 135.5 million in 2050

The organization of long-term care is one of the main challenges of public health and health policies in Europe and worldwide.

Wortmann M., Dementia: a global health priority – highlights from an ADI and World Health Organization report

DEMENTIA STAGES

- Early stage
- Mid-stage
- Late-stage



Mid-Stage

**Stage 5:
Moderately
Severe
Cognitive
Decline**

People in this stage have major memory deficiencies and need some assistance to complete their daily activities (dressing, bathing, preparing meals). Memory loss is more prominent and may include major relevant aspects of current lives; for example, people may not remember their address or phone number and may not know the time or day or where they are. Average duration: 1.5 years

Mid-Stage

**Stage 6:
Severe
Cognitive
Decline
(Middle
Dementia)**

People in Stage 6 require extensive assistance to carry out daily activities. They start to forget names of close family members and have little memory of recent events. Many people can remember only some details of earlier life. They also have difficulty counting down from 10 and finishing tasks. Incontinence (loss of bladder or bowel control) is a problem in this stage. Ability to speak declines. Personality changes, such as delusions (believing something to be true that is not), compulsions (repeating a simple behavior, such as cleaning), or anxiety and agitation may occur. Average duration: 2.5 years

Reisberg, et al., 1982; DeLeon and Reisberg,

QUALITY OF LIFE AS CRUCIAL PHENOMENON FOR DEMENTIA PATIENT

Patients problems:

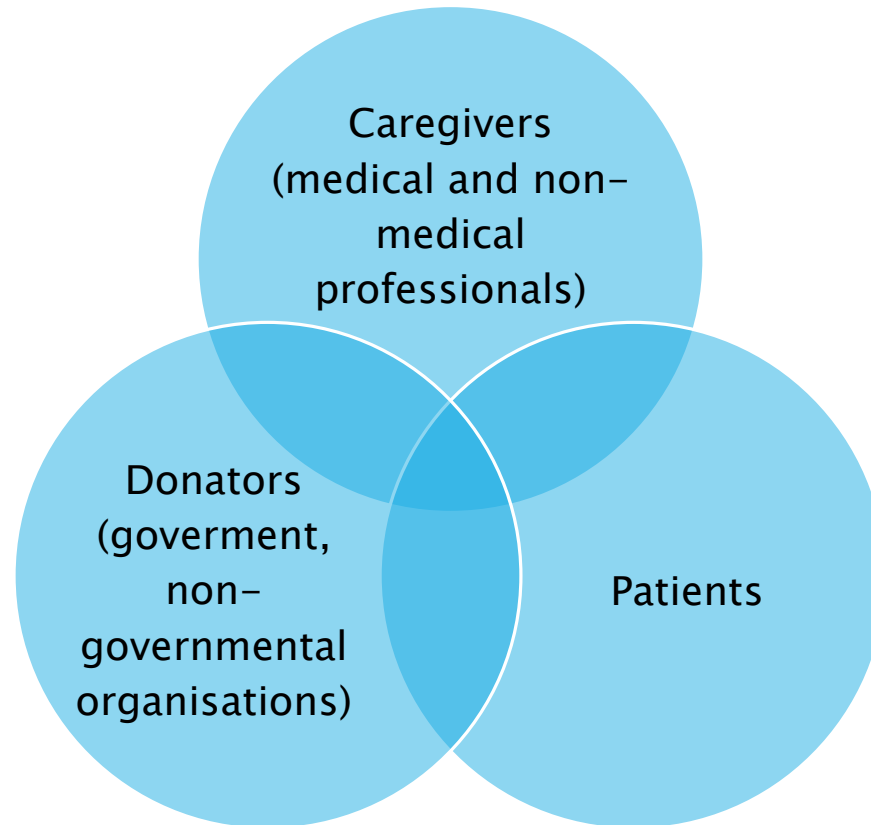
- Loss of pleasant events,
- Mood disturbances,
- Increasing cognitive impairment,
- Loss of ability to engage in rewarding and enjoyable.

LONG TERM CARE METHODS OF DEMENTIA TREATMENT:

- Pharmacology;
- Specialized care systems;
- Support for environmental approach (family members);
- Enhance patients social life;
- Providing functional support;
- Psychotherapy;
- Long term care.

*Gonzales-Salvador T., Lyketsos
C., Baker A. et al., 2000.*

STAKEHOLDERS



COST OF DEMENTIA (UNITED STATES CASE)

- The monetary cost of dementia in the United States ranges from \$157 billion to \$215 billion annually, making the disease more costly to the nation than either heart disease or cancer (New).

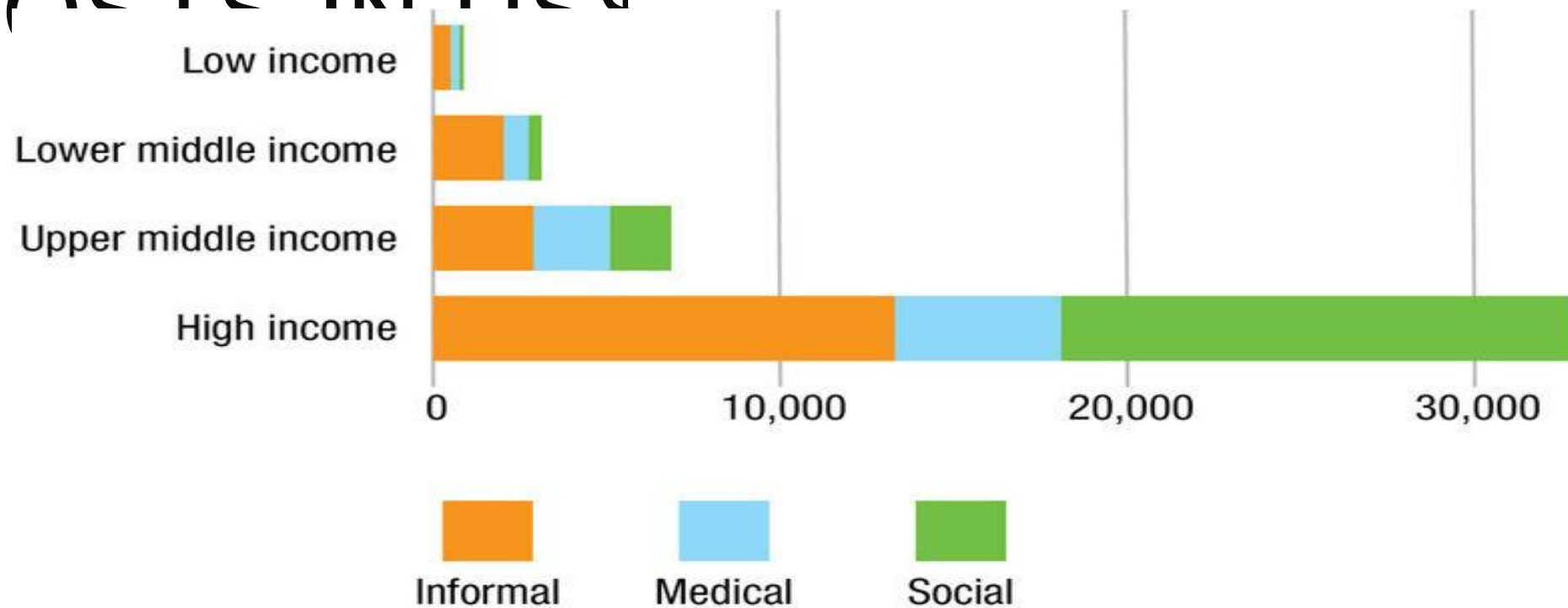


<http://fitpointa2.com/events-promotions/challenge/>

RAND Corporation study, 2013

CARE COSTS PER PERSON WITH DEMENTIA IN DIFFERENT WORLD BANK INCOME GROUPS.

COSTS IN USD



Wortmann, 2012

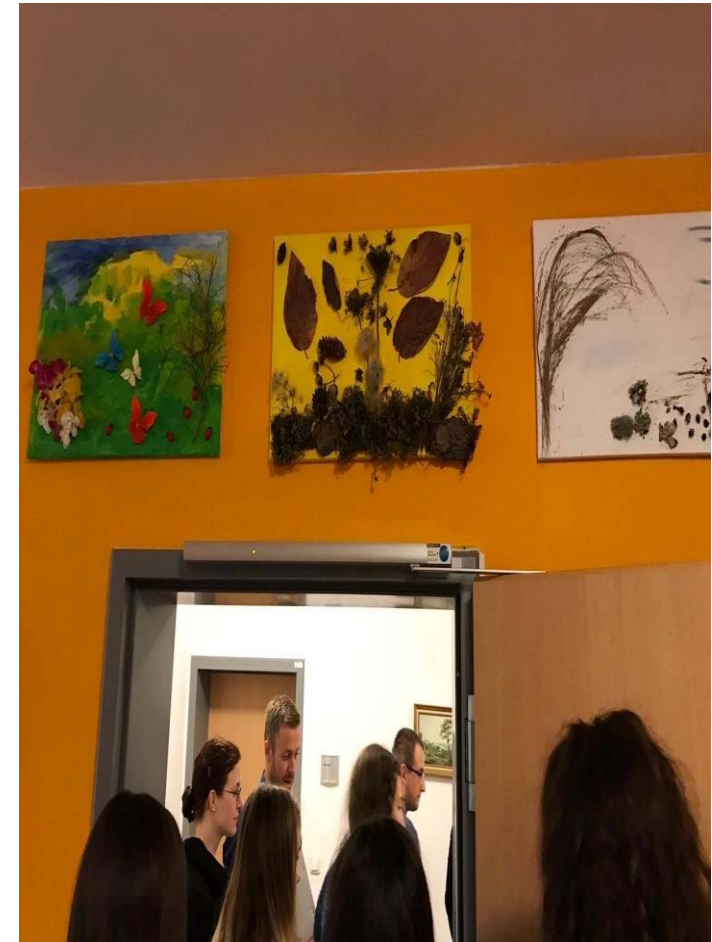
TECHNOLOGY ROLE IN LONG TERM CARE

- The LTC Health Information Technology Summit suggests adopting health information technology will facilitate coordination, improve quality of care, and enhance efficiency in LTC and across the healthcare delivery continuum.



<http://dementaidiary.blogspot.de/2012/11/the-broda-chairs-are-sign.html>

OUR VISIT IN NURSING HOME



MAKE SENIORS LIFE GREAT AGAIN



<http://www.fitnistics.com/5-things-to-make-your-elderly-relatives-happy/>

[BMC Geriatr.](#) 2017 Jul 19;17(1):155. doi: 10.1186/s12877-017-0550-0.

Quality of care and quality of life of people with dementia living at green care farms: a cross-sectional study.

[de Boer B](#)¹, [Hamers JPH](#)², [Zwakhalen SMG](#)², [Tan FES](#)³, [Verbeek H](#)².

[Arch Gerontol Geriatr.](#) 2017 Sep;72:52-58. doi: 10.1016/j.archger.2017.05.002. Epub 2017 May 17.

Struggling to maintain individuality - Describing the experience of food in nursing homes for people with dementia.

[Milte R](#)¹, [Shulver W](#)², [Killington M](#)³, [Bradley C](#)⁴, [Miller M](#)⁵, [Crotty M](#)⁶.



[Cochrane Database Syst Rev.](#) 2017 May 2;5:CD003477. doi: 10.1002/14651858.CD003477.pub3.

Music-based therapeutic interventions for people with dementia.

[van der Steen JT](#)¹, [van Soest-Poortvliet MC](#)², [van der Wouden JC](#)³, [Bruinsma MS](#)^{4,5}, [Scholten RJ](#)⁶, [Vink AC](#)⁷.

[Gerontologist.](#) 2017 Mar 15. doi: 10.1093/geront/gnw270. [Epub ahead of print]

Effectiveness of a Virtual Reality Forest on People With Dementia: A Mixed Methods Pilot Study.

[Moyle W](#)^{1,2}, [Jones C](#)^{1,2}, [Dwan T](#)¹, [Petrovich T](#)³.

[Palliat Med.](#) 2017 Jul 1:269216317719588. doi: 10.1177/0269216317719588. [Epub ahead of print]

Quasi-experimental evaluation of a multifaceted intervention to improve quality of end-of-life care and quality of dying for patients with advanced dementia in long-term care institutions.

[Verreault R](#)^{1,2}, [Arcand M](#)³, [Misson L](#)², [Durand PJ](#)^{1,2}, [Kroger E](#)², [Aubin M](#)^{1,2}, [Savoie M](#)⁴, [Hadjistavropoulos T](#)⁵, [Kaasalainen S](#)⁶, [Bédard A](#)², [Grégoire A](#)³, [Carmichael PH](#)².

CARE IN NURSING HOMES

- Traditional nursing homes: Care often focus on physical care, keeping residents safe and preventing health care problems
- More emphasis on a psychosocial and homelike care concept
- New concepts:
 - Quality of life,
 - Autonomy,
 - Allow residents to continue the life they had before admission.

de Boer et al., 2017

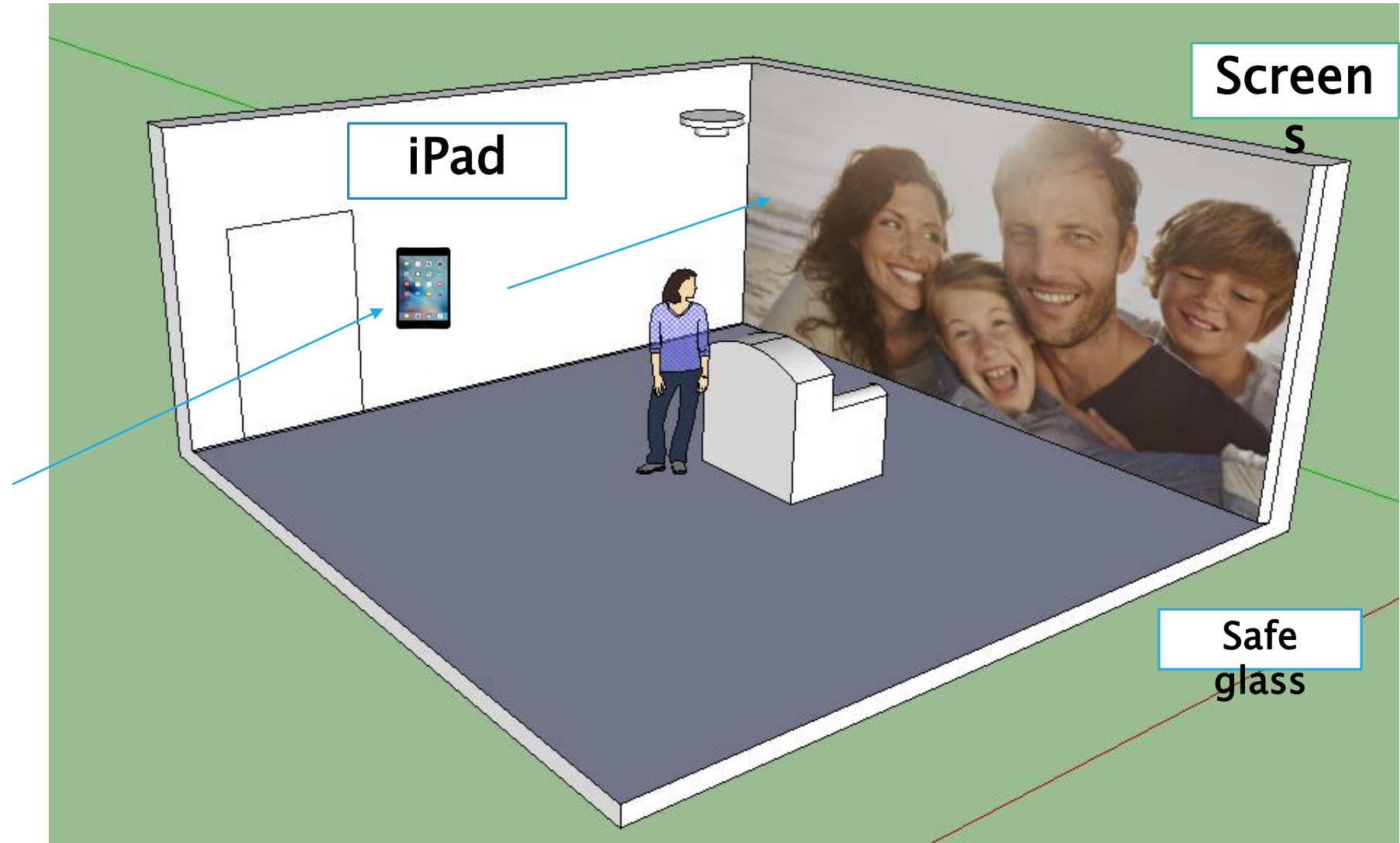
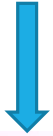


THE WAL

THE WALL



360 camera



ARCHITECTURAL SOLUTION FOR

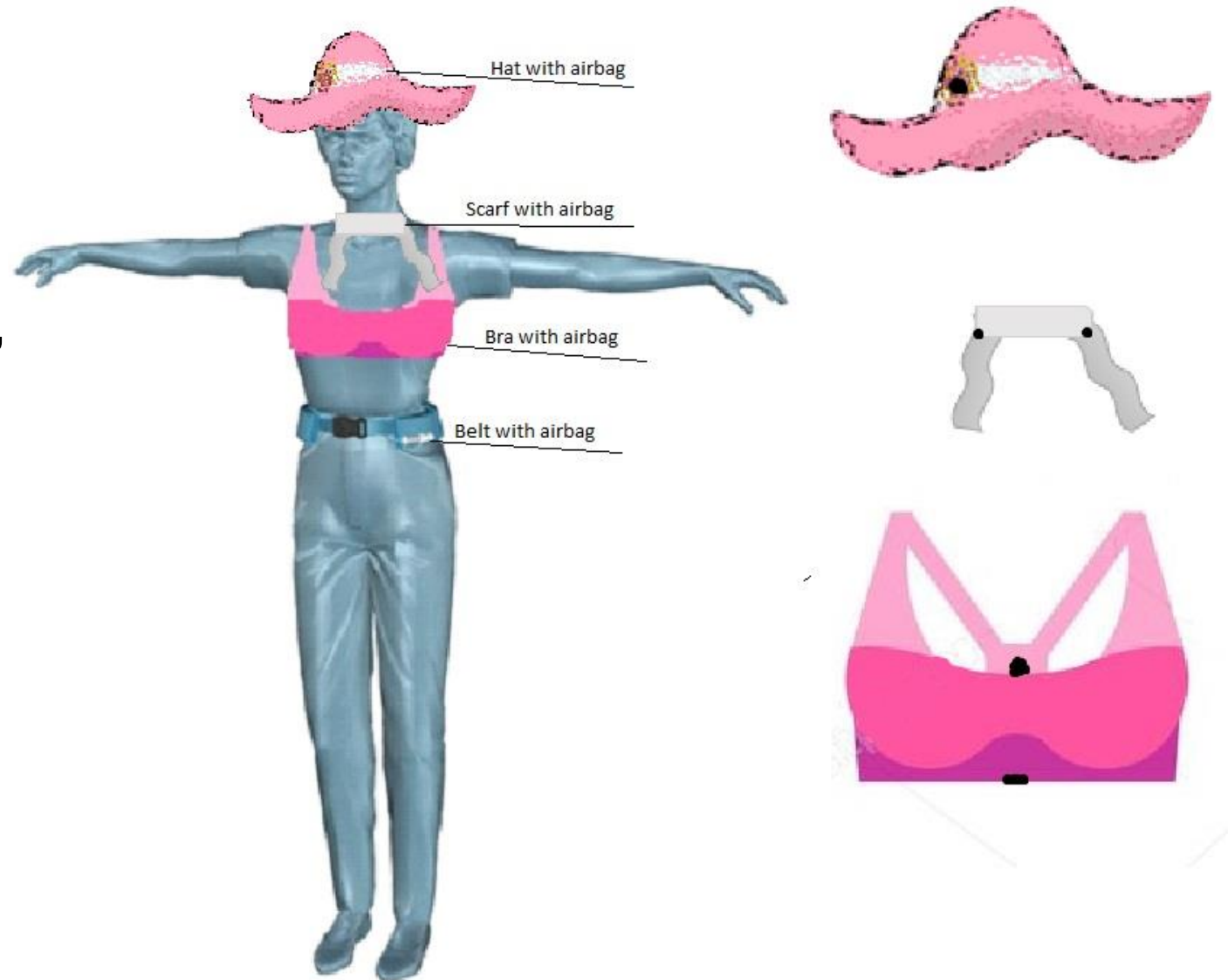
Walls with big screens to monitoring patients,
Helmets against falls,
Airbag for patients which fall so often,



<https://www.win-health.com/head-protection-for-elderly.html>
<https://www.extremetech.com/extreme/137543-think-you-have-a-big-screen-tv-check-out-these-monster-video-walls>

AIRBAGS

Airbags in hat, scarf, bra,
Special electrodes
Light weight
It's personalized



Special electrodes witch will sensoring when somebody falls down

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=VHJBPK34SQ8](https://www.youtube.com/watch?v=VHJBPK34SQ8)



WALL

Screens for all over the bedroom,
Glass which not hurt the eyes,
iPad connection to show the images, games, connect with family,
Scanner to scan the bedroom of the patient.

CHAIR

- Comfortable,
- Waterproof,
- Sensors to change the position of the patient if he stays too long in the same distance for a long time and prevent decubits,
- Move up/downstairs,
- Something to prevent falls and chair stabilization,
- Personal screen,
- Pass of water, to control the temperature.



<http://www.arrow-lifts.co.uk/lift-stairlifts-stair-lift-new-stairlift-repair-stairlift-service-devon-cornwall.php>



<https://www.youtube.com/watch?v=RgnifnNTfXs>



https://www.pomuckyseniorum.cz/cz-kategorie_663994-0-antidekubitni-matrace.html

<https://www.zdravotnickepotreby-eshop.cz/product/podlozky/do-voziku/pc9-podlozka-antidekubitni-pes/737>