



Creating Public & Social Value

‘Making prevention a social movement: Lessons from Italy’

‘Patient self-management programme for
diabetes & teenagers’ lifestyle program,
Adopting a Peer-to-Peer approach (BeFood Project)

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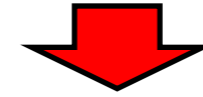
Making prevention a social movement...

The starting point:

- 🍊 **How are we promoting healthy lifestyles?**
- 🍊 **Are we adopting policies and creating initiatives addressed to different population clusters?**
- 🍊 **What do we know about the behaviour of these different groups of people? Do we know it all?**
- 🍊 **Are our strategies “cost- effective”?**

Is there room to create public and social value?

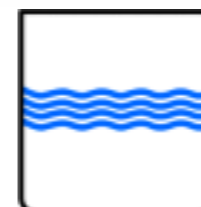
Three experiences from Tuscany... still ongoing...





The first Tuscan experience:
**An Intervention of Structured and
Systematic Education for People with
Diabetes.**

*Take Action on Diet, Physical Activity and Self-Management
of Chronic Disease for an Effective Impact on Weight Control
and Diabetes*



Diabetes

Worldwide,

- 387 million people in the world suffering from diabetes (8.3% of the population);
- 1 out of 2 people having diabetes without the knowledge of having the disease;
- 4.9 million deaths;
- Costs of about \$ 612 billion;
- In 2035, the number of people with diabetes will increase by about 205 million (WHO, data for 2014 year).

Italy,

- Prevalence rate is 7.7% (i.e. 3.5 million people), with 1 out of 3 people who still does not know he/she has the disease;
- 3,371.23 \$ (USD) per capita cost (vs 2,775.98 \$, EU average costs);
- Diabetes is a widespread disease, especially in the 55+ population;
- Significant geographical variation in terms of prevalence rate: lower in the North and higher in the South

Tuscany,

- **4.2% of the population suffering from diabetes;**
- **Prevalence is higher among people: older, with low education and economic condition, and obese (12.4%)**

Diabetes and risk factors

Diabetes, overweight/obesity and physical activity:

- 90% of individuals with diabetes in the world are suffering from **type2 diabetes**;
- **Obesity and reduced physical activity** are among its major **risk factors**;
- In Italy, prevalence rates of individuals with diabetes and overweight or obesity are 43.5 and 26.1 respectively, against prevalence rates of 35.8 and 10 in the overall adult population.



Sources: Institute of Health (2014): <http://www.epicentro.iss.it/passi/rapporto2013/sovrappeso.asp>; Perrot M, et al. (2011) Obesity is associated with lower mortality risk in elderly diabetic subjects: the Casale Monferrato Study. Acta Diabetol; November 9th; Zoppini G, et al. (2003), body mass index and the risk of mortality in type 2 diabetic patients from Verona. Int J Obesity; 27: 281-5. WHO Global Strategy on Diet, Physical Activity and Health (2004); Wilding et al (2014), The Importance of weight management in type 2 diabetes mellitus. Int J Clin Pract, June, 68, 6, 682-691; Bolen et al (2014), Effectiveness and Safety of Patient Activation Interventions for Adults with Type 2 Diabetes: Systematic Review, Meta-Analysis, and Meta-regression, January J Intern Med 29 (8): 1166-76; Steinsbekk et al (2012), Group based diabetes self-management education Compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis, BMC Health Services Research, 12: 213; Ministry of Health, National Diabetes Committee, plan on diabetes.

Lifestyle and education programs:



Introducing **proper diet and regular physical activity** would prevent the onset of the disease, and reduce their incidence of acute events or other co-morbidities;



... Who is in charge of the training process???

Health professionals or peer leaders?

The patient is able to be effective in managing weight and its effects on diabetes through the **participation in self-management courses**

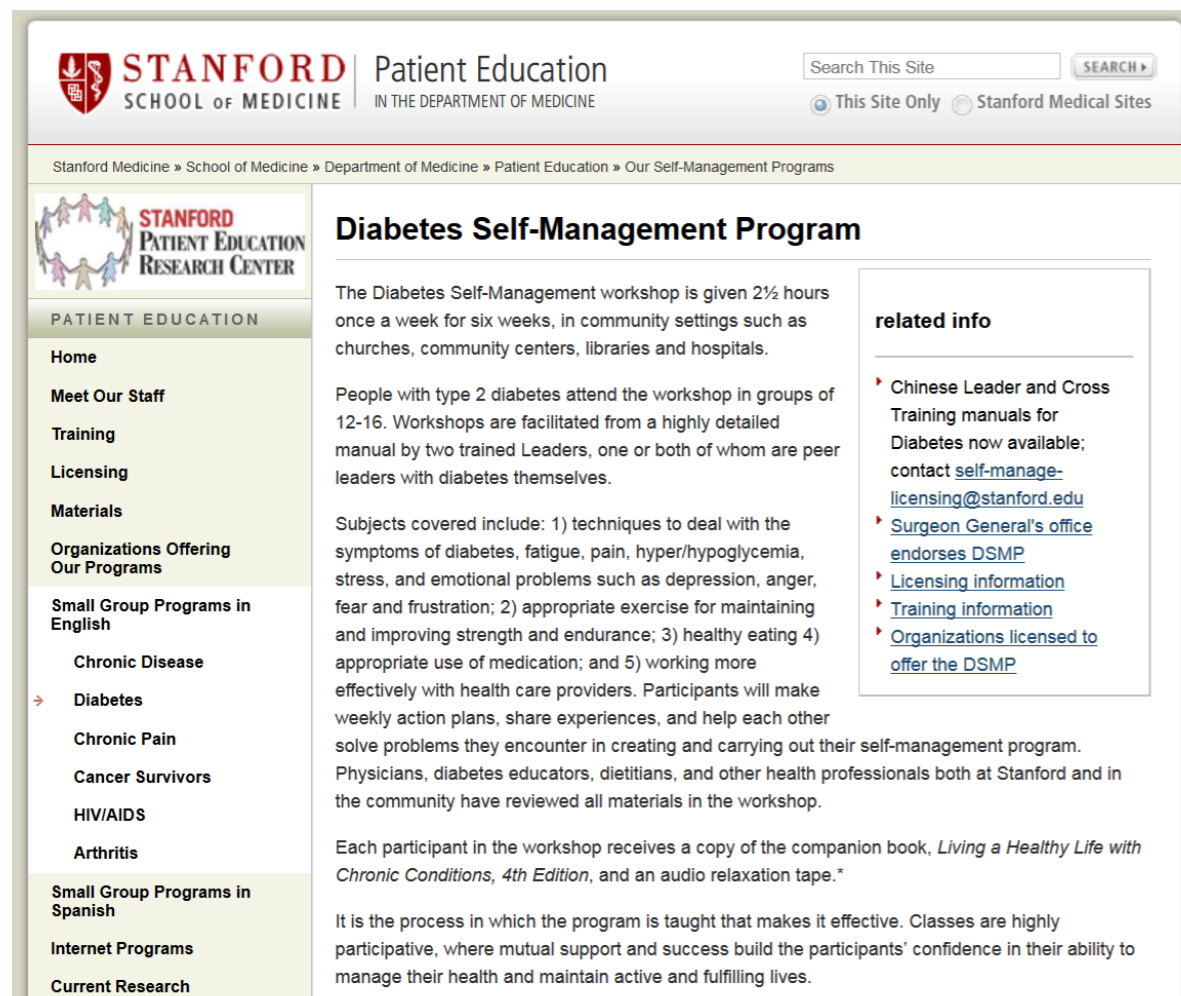


Patient Self management

Sources: Institute of Health (2014): <http://www.epicentro.iss.it/passi/rapporto2013/sovrappeso.asp>; Perrot M, et al. (2011) Obesity is associated with lower mortality risk in elderly diabetic subjects: the Casale Monferrato Study. Acta Diabetol; November 9th; Zoppini G, et al. (2003), body mass index and the risk of mortality in type 2 diabetic patients from Verona. Int J Obesity; 27: 281-5. WHO Global Strategy on Diet, Physical Activity and Health (2004); Wilding et al (2014), The Importance of weight management in type 2 diabetes mellitus. Int J Clin Pract, June, 68, 6, 682-691; Bolen et al (2014), Effectiveness and Safety of Patient Activation Interventions for Adults with Type 2 Diabetes: Systematic Review, Meta-Analysis, and Meta-regression, January J Intern Med 29 (8): 1166-76; Steinsbekk et al (2012), Group based diabetes self-management education Compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis, BMC Health Services Research, 12: 213; Ministry of Health, National Diabetes Committee, plan on diabetes.

An example of evidence-based program

Diabetes Self-Management Program



The screenshot shows the Stanford Patient Education website for the Diabetes Self-Management Program. The header includes the Stanford School of Medicine logo and a search bar. The main content area is titled "Diabetes Self-Management Program" and describes the workshop's structure, goals, and topics. A sidebar on the left lists various patient education resources, with "Diabetes" highlighted under "Small Group Programs in English". A "related info" box on the right provides links to training manuals, licensing information, and other resources.

STANFORD Patient Education
SCHOOL of MEDICINE IN THE DEPARTMENT of MEDICINE

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- Small Group Programs in English
 - Chronic Disease
 - Diabetes
 - Chronic Pain
 - Cancer Survivors
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 - Arthritis
- Small Group Programs in Spanish
- Internet Programs
- Current Research

Diabetes Self-Management Program

The Diabetes Self-Management workshop is given 2½ hours once a week for six weeks, in community settings such as churches, community centers, libraries and hospitals.

People with type 2 diabetes attend the workshop in groups of 12-16. Workshops are facilitated from a highly detailed manual by two trained Leaders, one or both of whom are peer leaders with diabetes themselves.

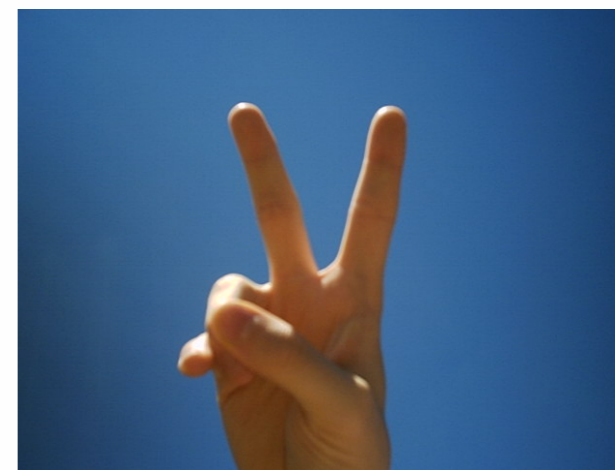
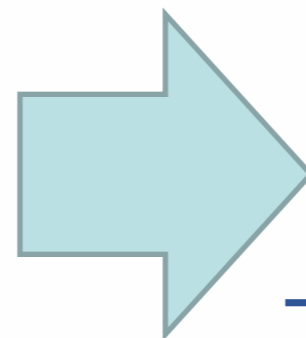
Subjects covered include: 1) techniques to deal with the symptoms of diabetes, fatigue, pain, hyper/hypoglycemia, stress, and emotional problems such as depression, anger, fear and frustration; 2) appropriate exercise for maintaining and improving strength and endurance; 3) healthy eating 4) appropriate use of medication; and 5) working more effectively with health care providers. Participants will make weekly action plans, share experiences, and help each other solve problems they encounter in creating and carrying out their self-management program. Physicians, diabetes educators, dietitians, and other health professionals both at Stanford and in the community have reviewed all materials in the workshop.

Each participant in the workshop receives a copy of the companion book, *Living a Healthy Life with Chronic Conditions, 4th Edition*, and an audio relaxation tape.*

It is the process in which the program is taught that makes it effective. Classes are highly participative, where mutual support and success build the participants' confidence in their ability to manage their health and maintain active and fulfilling lives.

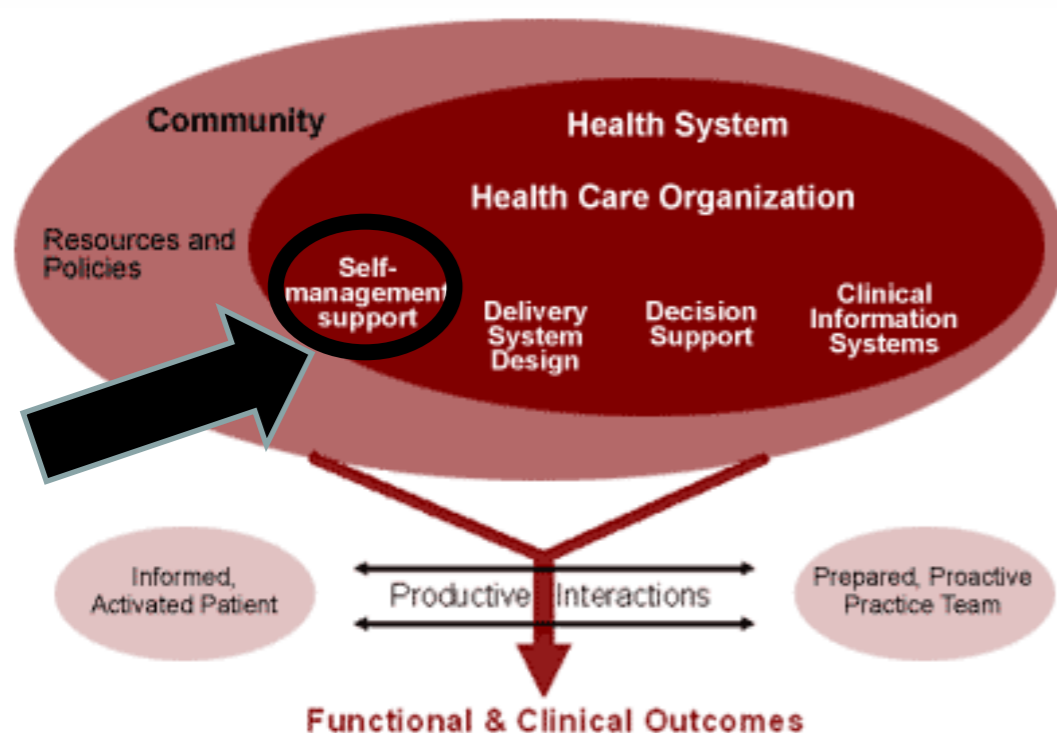
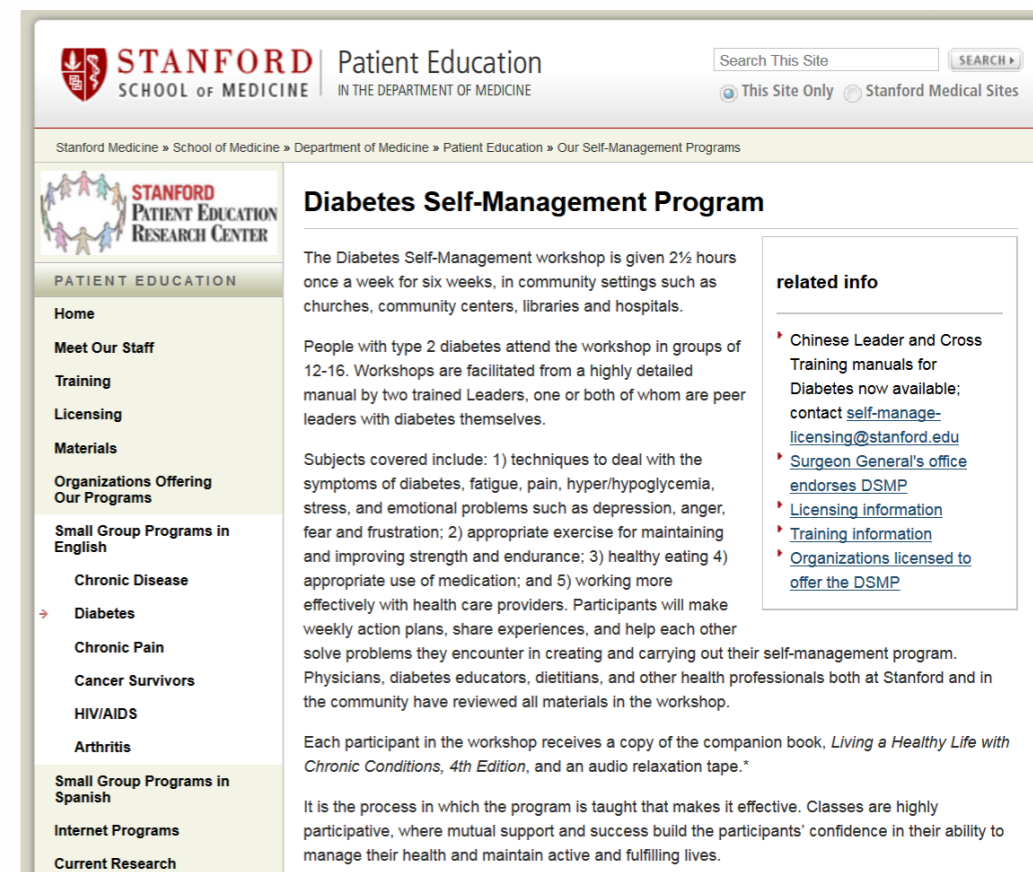
related info

- Chinese Leader and Cross Training manuals for Diabetes now available; contact self-manage-licensing@stanford.edu
- [Surgeon General's office endorses DSMP](#)
- [Licensing information](#)
- [Training information](#)
- [Organizations licensed to offer the DSMP](#)



- + Health Behaviour
- + Psychological Health Status
- + Physical Health Status
- Health Care Utilization

Tuscany Region, since 2010...

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Early experience of
 Chronic disease and
 Diabetes Self Management
 Programs in Tuscany
 2010 - 2013

4 LHAs: Prato, Livorno, Siena, Firenze

129 classes,
 1540 participants

Tuscany Region, 2015-2016

Extension of DSM Program
(National Project)

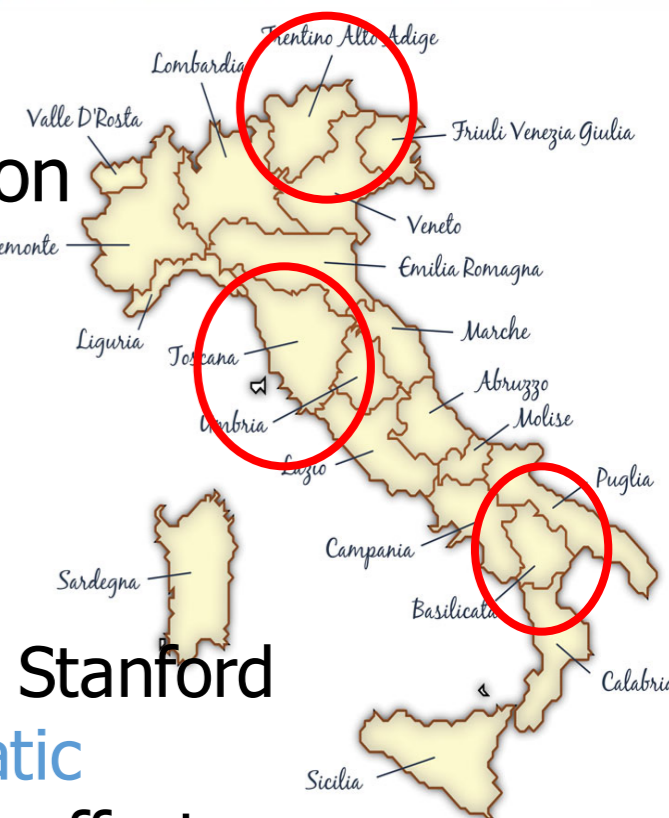
Ministero della Salute



takes part in a National Project that promotes an intervention to prevent and control diabetes and obesity. This Project is funded by the Italian Health Ministry.

Goals

- To implement the Diabetes Self Management Program (by the Stanford Patient Education Research Center), **a structured and systematic educational program for people with diabetes (type II)**, whose effects on outcome is stated in literature;
 - **To strengthen the patients' ability to be self-effective in managing their disease and having healthy lifestyles;**
 - **To act on healthy diet and physical activity** in order to control weight and its effect on diabetes.





Tuscany Region, 2015-2016

Engaged Leaders

Health professional leader

Peer leader



6 workshops of 2 ½ hours
in small groups (max 12-16 pp)



7 LHAs: Lucca, Prato, Pisa, Livorno,
Siena, Arezzo, Firenze

45 classes,
563 participants



Peer leaders

Evidence: A Peer-led program can produce positive outcomes!

- Symptoms of hypoglycemia (at 6 month)
- Depression (at 6 and 12 month)
- + Communication with physicians (at 6 and 12 month)
- + Healthy eating (at 6 and 12 month) and reading food labels (at 6 month)
- + Patient activation and self-efficacy (at 6 and 12 month)

Community-Based Peer-Led Diabetes Self-management

A Randomized Trial

Lorig, Kate, et al. "Community-based peer-led diabetes self-management a randomized trial." *The Diabetes Educator* 35.4 (2009): 641-651.



Health professional leader

Peer leader

Peer leaders in Tuscany...



Interviewer: Who receives more questions from participants?

Umberto: **I do**

Catia: They ask Umberto issues that they usually would not deal with during consultation with health professionals

Interviewer: At the end of the course what do you leave in the hands of the participants?

Umberto: **more self esteem**

Interviewer: what do participants leave in your hands?

Umberto: **feeling to have been important for them**

Extension of DSM Program (National Project) 2015 - 2016

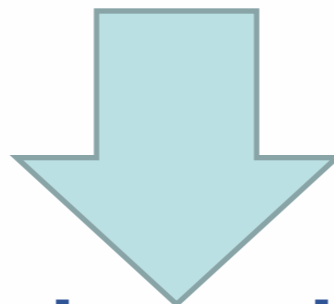


Ministero della Salute



Tuscany Region

Monitoring the program objectives achievement (health status, behaviors, etc.) at baseline, (3), 6 and 12 months; analyzing data and publish results.



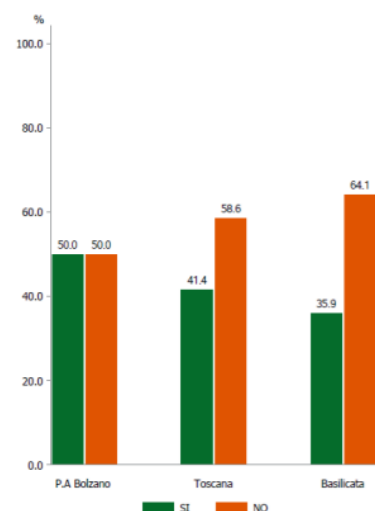
At 3 month it has been observed an improvement of the % of diabetes persons who:

- Reduce consumption of sweet drinks;
- Read nutritional labels
- Spend more time in stretching activity

Monitoring the program

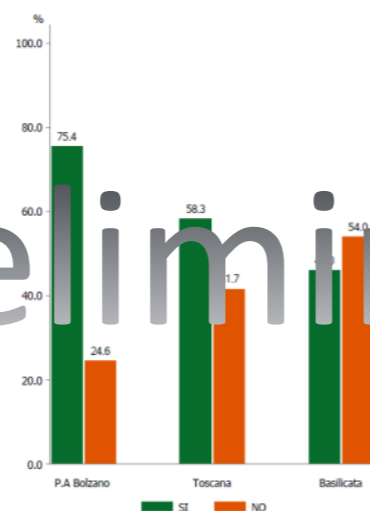
Alimentazione. Questionario T0

Nell'ultima settimana ha letto le etichette nutrizionali quando ha acquistato alimenti confezionati?



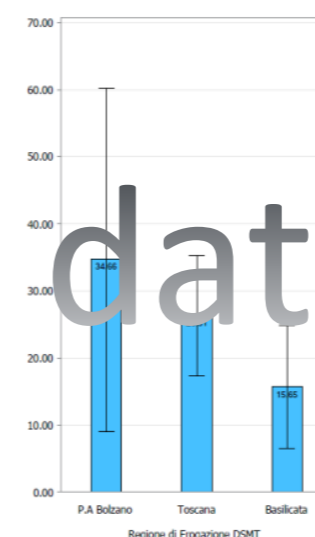
Alimentazione. Questionario T3

Nell'ultima settimana ha letto le etichette nutrizionali quando ha acquistato alimenti confezionati?



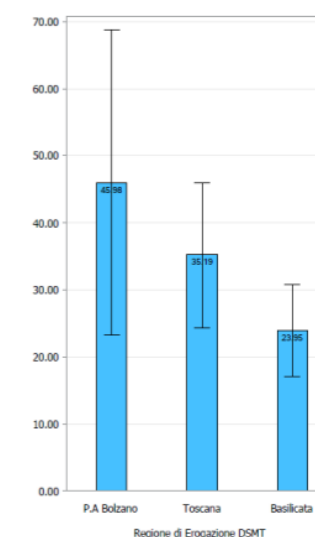
Esercizio fisico. Questionario T0

Durante l'ultima settimana, quanto tempo ha dedicato alle seguenti attività?
Esercizi di allungamento/stiramento (stretching) o flessibilità articolare, pesi, etc.
(dati espressi in minuti)



Esercizio fisico. Questionario T3

Durante l'ultima settimana, quanto tempo ha dedicato alle seguenti attività?
Esercizi di allungamento/stiramento (stretching) o flessibilità articolare, pesi, etc.
(dati espressi in minuti)



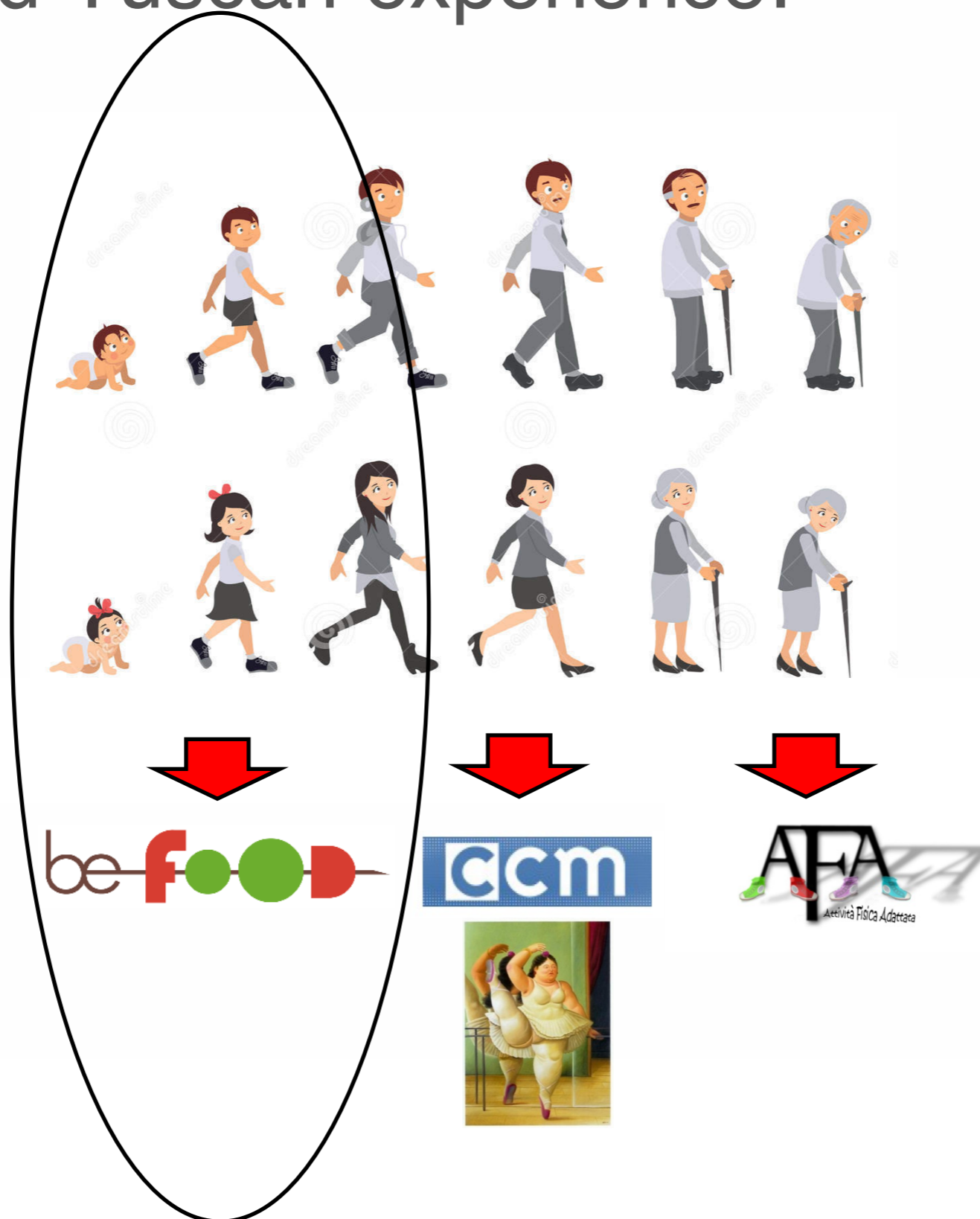
Preliminary data

Action 4

Monitoring the program objectives achievement (health status, behaviors, etc.) at baseline, (3), 6 and 12 months; analyzing data and publish results.



The second Tuscan experience:



The starting point: a review of public initiatives

There is **little evidence on the effectiveness of actions** on childhood obesity prevention and promotion of healthy lifestyles (nutrition and physical activity).

Activities based only on education or **one-way actions** produce **less positive** impacts on **behavioral change**.

Moreover for several years, the Tuscany region has invested many resources on the topic, carrying out epidemiological surveys on teenagers and developing prevention programs in schools taught by the staff of the Local Health Authorities.

The effectiveness of the actions depends on:

- **Tools, channels** and **language** used;
- **Viral and me-too** processes, as well as **peer-to-peer** impact;
- **Gaming**.

be Project: a paradigm change

- Can we expect that teenagers , that are now message recipients, will become message producers?
- Can we expect that teenagers will become “first actors” of their own health?
- Can we expect that teenagers themselves will be capable of "producing" and promoting their health?

Message



Messenger



BeFood Project

BeFood is a “**narrative project**” that allows **young people to become responsible of their own future and co-producers of social value**

Teenagers could:

- 🍅 **“Describe” who they are** in terms of lifestyle choices, food, self-esteem, physical activity and sport;
- 🍅 **Participate** in the whole research pathway;
- 🍅 **Activate peer-to-peer actions;**
- 🍅 **Become responsible** of their health status;
- 🍅 **Suggest new ways for «making prevention»** based on their preferences.



The Main Goal

«**Co-creation**» of **prevention actions** on the base of the obtained evidence.

The innovative approach of BeFood is based on:

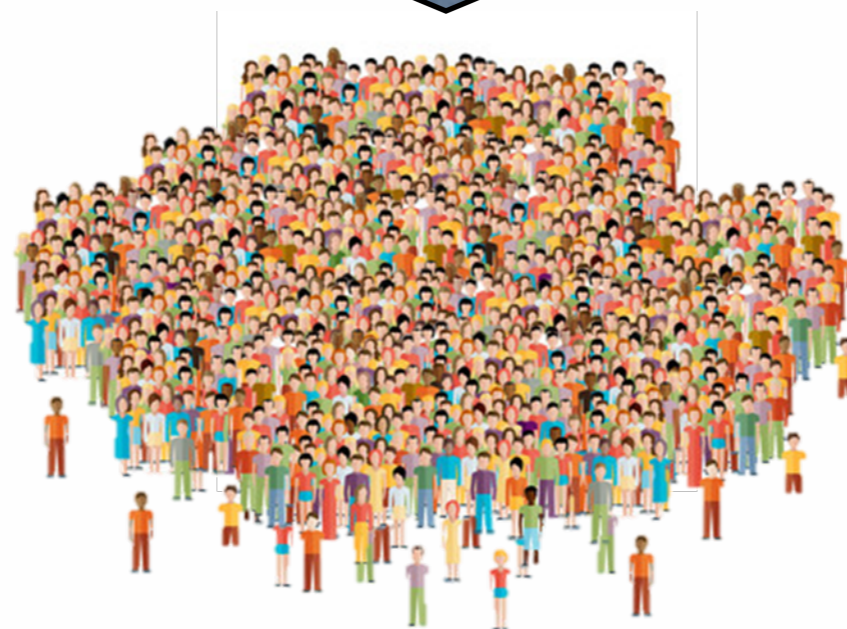
- 🥦 **Engagement** of the teenagers during the whole pathway;
- 🥦 **Peer-to-peer actions** by promoting an active role of the youngsters throughout the different stages of the research project.

We involved 50 high-school students...





50 Tuscan students in charge



5,300 teenagers engaged!

Research – Project Pathway



Training and
Testing

Proposals, Data Analysis and
Presentation of Results



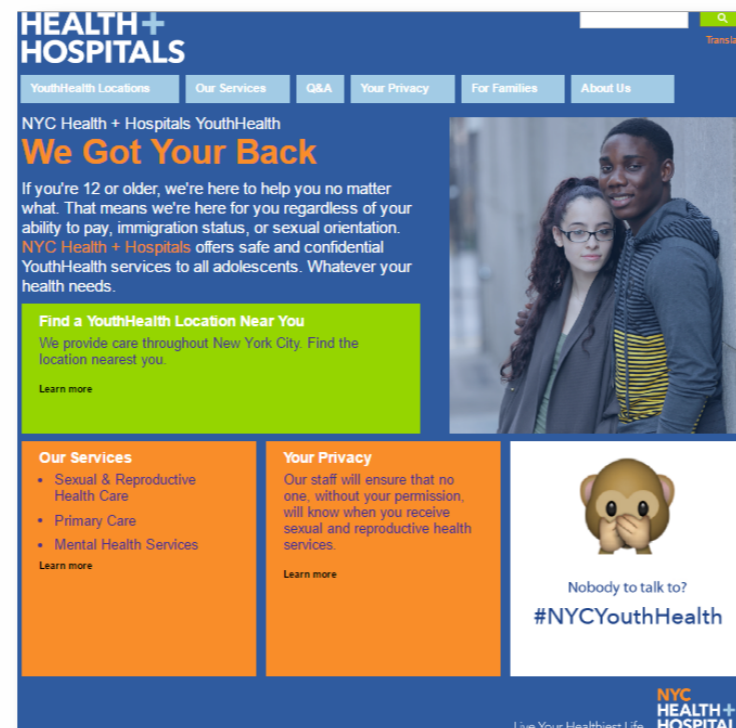
High-School students
must complete, at least,
150 working hours

Management
and disclosure
of the survey

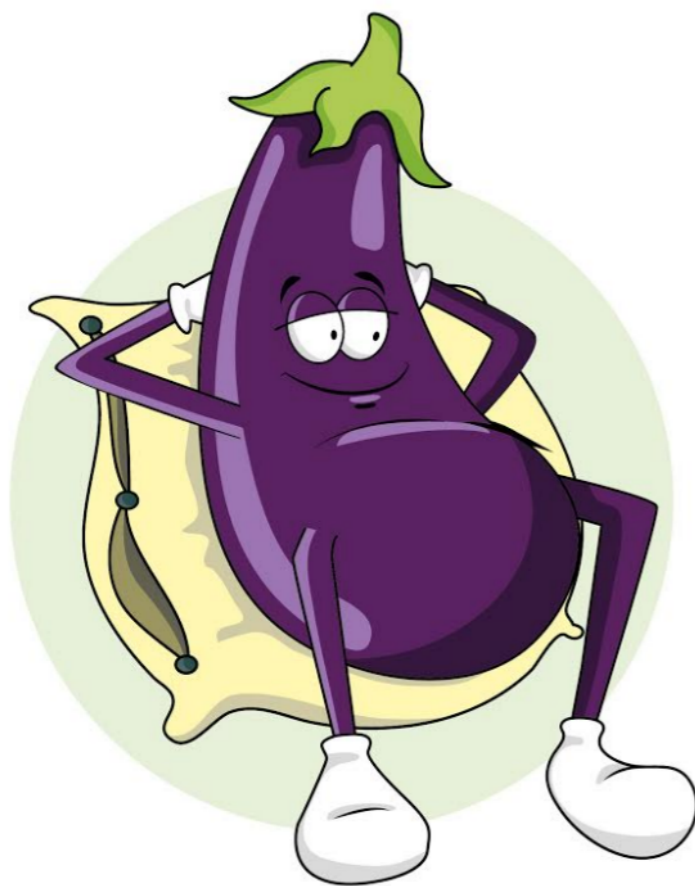


The survey and discrete choice experiments are managed using **digital instruments and languages.**

- 🍅 **Technologies** (web apps, social networks)
- 🍅 **Language** (#hashtag, vocabulary, ads, pins, figures)



befood.sssup.it/?sssup_demo



By completing the survey and
the discrete choice
experiments,
you can find out **your “profile”**
with some recommendations to
improve your lifestyle
(nutrition and activities)

Nutrition
according to the
food pyramid
(of Tuscany
Region)



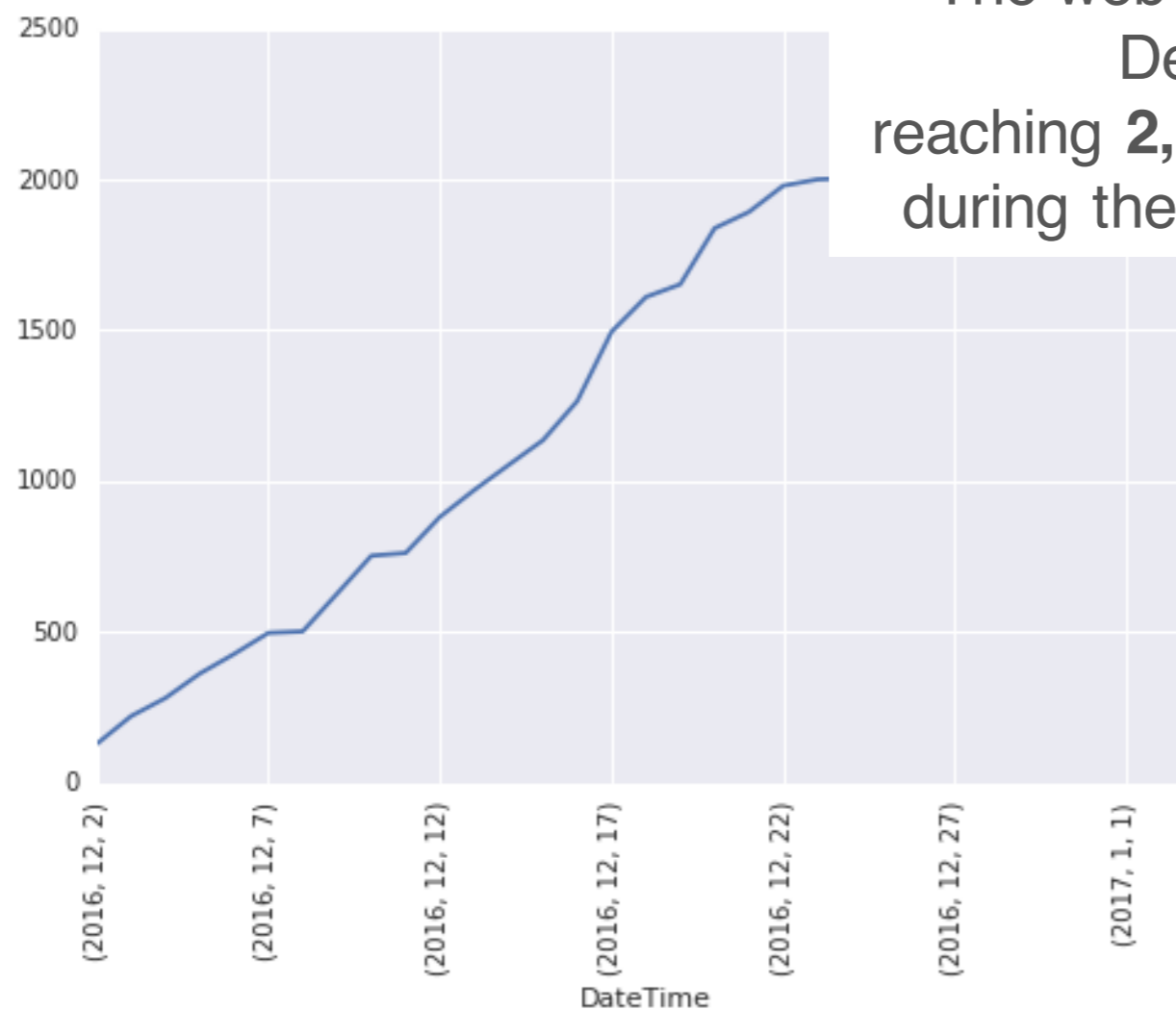
Physical activity according to WHO and the Tuscany Region recommendations



Management and Disclosure of the Survey

- 🍓 The 50 students defined their own **strategies**, according to the **characteristics of the local context** (province) and **possibilities** (costs, time, network, ...).
- 🍓 They are actually **disclosing the survey using social media** (Facebook, Twitter, Snapchat), **communication tools** (posters, leaflets) in school, gyms and other places where teenagers meet, and through other **instant messaging tools** (WhatsApp, Fb messenger).
- 🍓 They are also **presenting the project** at their own school –and not only-, **managing the survey directly**.

Management and Disclosure of the Survey



The web app was launched
Dec 2nd 2016,
reaching **2,000 questionnaires**
during the Christmas holidays

Regarding the 50 students who are conducting the research with us, we have also adopted:

- 🐟 incentive mechanisms based on **gaming, competition and collaboration**;
- 🐟 **participative** processes:
 - 🌀 Definition and sharing of research tools and policy strategies/actions (**leading role**)
 - 🌀 Identification of channels, tools and vocabulary (**target**)
 - 🌀 “Internalization” and production of the content of the message (promotion of healthy lifestyles) (**messengers**)



Final Prize...

A (healthy) **cooking class** at the market of Florence to:


- 👓 **reinforce** the message;
- 👓 help behavioral **changing**.

according to recent experiences in several medicine universities (such as *Tulane University School of Medicine* of Louisiana)

OUR PICKS LATEST POPULAR QUARTZ OBSESSIONS

EAT UP

The future of medicine is food



Med school has changed. (Tulane University)

SHARE

WRITTEN BY
[Deena Shanker](#)

November 10, 2015

In between anatomy and biochemistry, medical students in the US are learning how to sauté, simmer and season healthy, homemade meals.

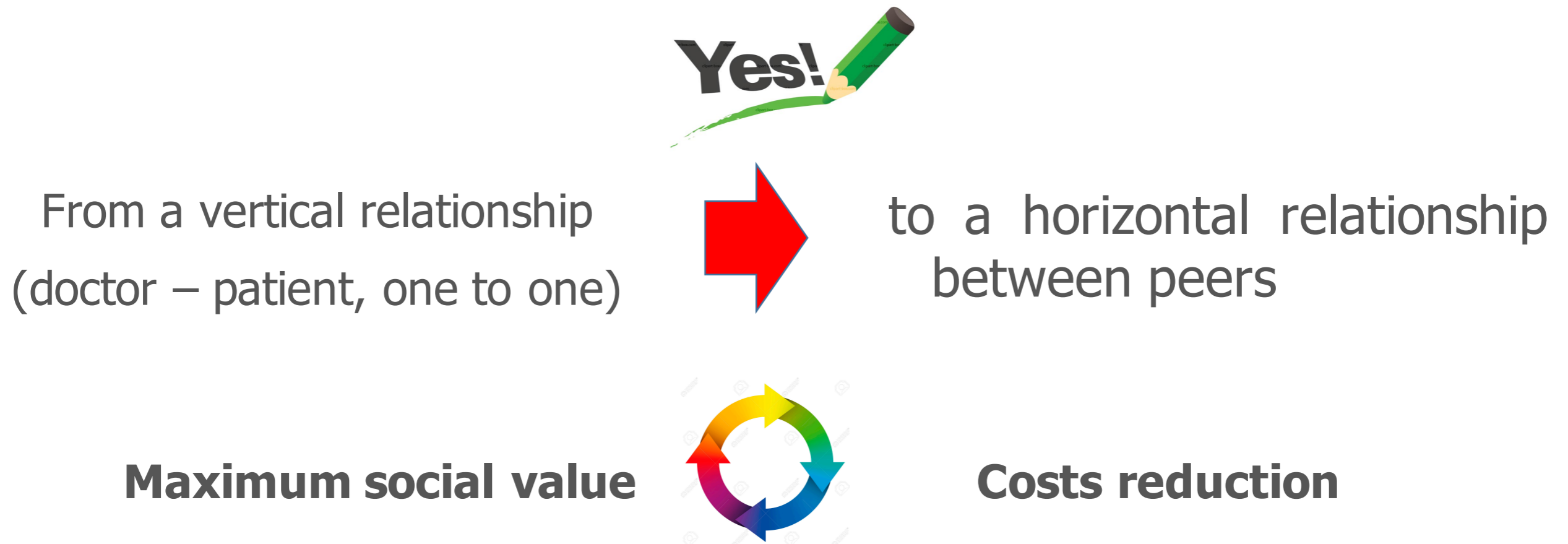
Since 2012, first and second year students at Tulane University School of Medicine in Louisiana have been learning how to cook. Since the program launched, Tulane has built the country's [first med school-affiliated teaching kitchen](#) and become the first medical school to count a chef as a full-time instructor.

Sixteen med schools have now licensed the center's curriculum, as have two non-medical schools, the Children's Hospital San Antonio-Sky



Conclusions: 3 questions

- Can we expect that patients will become message producers?
- Can we expect that patients will become “first actors” of their own health?
- Can we expect that patients themselves will be capable of “producing” and promoting their health?



Similar examples of the same phenomenon can be... car sharing (BlaBla Car, Uber...) or house swapping (AirBnB...)