In what area/topic can the EU make the biggest impact in improving access to health for persons with disabilities?

- **Priority:** Targeting the risk factors (diet, physical activity, obesity) for non-communicable diseases (CVD, cancer, diabetes)
- **Target:** Organisations / Complex Systems to implement evidence based programs / large scale up
- **Strategy:** Logic modelling (implementation science)

Evidence-based weight management programs

Complex problems require complex solutions (MRC Guidelines, 2000, 2008)

- Programs need underpinned by **individual change theories**

- (social cognitive theory, health belief model, theory of planned behaviour, etc.)

- Programs need an **evidence-base** (outcome measurement; feasibility, pilot and RCT studies, SR / meta analysis)

- Programs need to be **implemented within communities / systems** (implementation science)

Evidence-based weight management programs

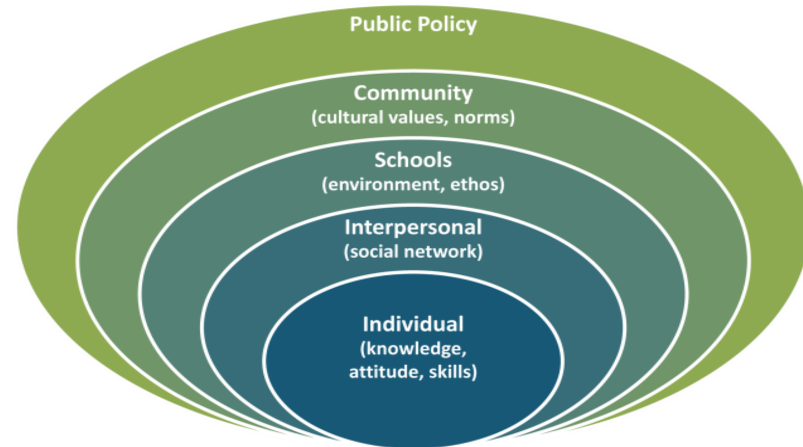
- **NICE (2014) recommended that weight management programs all needed to be multi-component:**

    - **Dietary** change components (daily energy-deficit diet);
    - **Physical** activity components;
    - **Behaviour change** techniques to sustain behaviour change;
    - And **tailored** to the needs of the specific population.

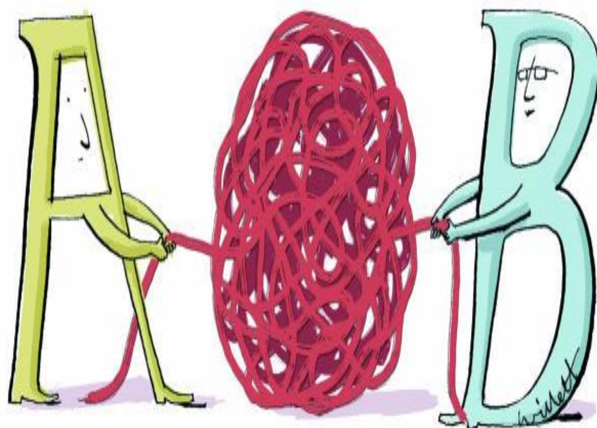
Designing and Evaluating Programs in Complex Systems

Co-production

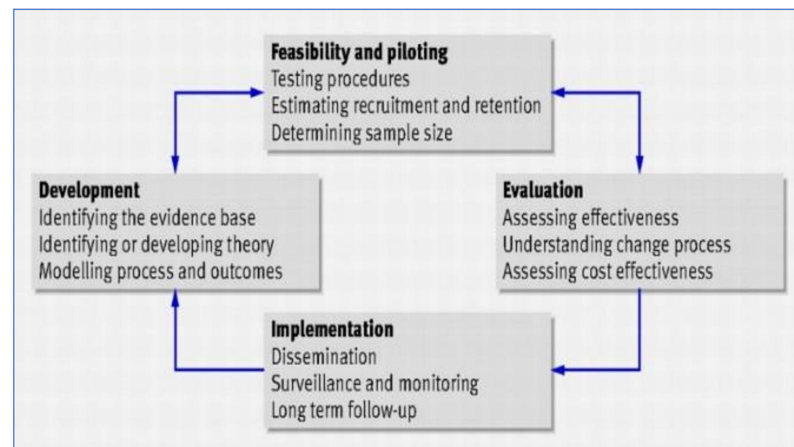
Ecological thinking



Complex systems thinking



The MRC Framework (MRC, 2000, 2008, 2019)



CONTEXT (using the CICI framework):

- **Geography:** assessment of the broader physical enviornment (i.e. family home, residential facility, day-care centre)
- **Epidemiology:** demographics of the population, identifying all stakeholders perception of obesity, associated problems and burden
- **Socio-cultural:** what is the discourse of the organizations thinking around reducing obesity and weight management in people with ID (implicit behaviour patterns, knowledge, beliefs, customs)
- **Socio-economic:** social and economic resources of, and access to, the community (i.e. opportunity versus lost costs)
- **Political:** services, leadership, governance and rules that govern interactions between them
- **Legal:** rules and regulations that have been established to protect a population
- **Ethical:** reflections on morality, norms, rules, standards and princilpes that guide decisions being taken

INPUTS / RESOURCES

- ID organization to identify obesity as a strategic priority
- Selection of an evidenced-based MCI (i.e. Take 5 (Melville), or the Swedish study Bergstorm))
- Co-production meetings to plan the delivery of the obesity MCI
- ID organisations to identify staff to become master trainers of the obesity MCI
- People with ID to be involved as co-trainers
- Local partnerships with health professionals and community services developed
- Local communities supported to the make reasonable adjustments
- Agreement sought on the base objective outcome measures (BMI, step count, dietary intake, etc)

OUTPUTS / ACTIVITIES

- The obesity MCI training delivered to all staff
- Staff who received the obesity MCI training to work with the adults with ID
- Staff to support the adults with ID to engage in physical activity (i.e. walking, swimming, etc.) within the organization
- Engagement of physical activity/reduction in sedentary behaviour via local community groups (i.e. Sports Training / Fitness Programs)
- Healthy eating programs developed and delivered
- People with ID supported to access local community groups (i.e. weight programmes)
- Pre and Post MCI data collection undertaken (weight, BMI step count, dietary intake, knowledge and attitudes to weight and physical activity, etc)
- Feedback is sought from people with ID, their carers and staff on the success of the MCI

MECHANISMS OF CHANGE

- Training staff in the obesity MCI
- Adults with ID have accessibility to modified diets: 600kcal/day energy deficit diets (i.e. containing 600kcal less than the person needs to stay the same weight)
- Adults wih ID be supported to engage in physical activities that fit easily into their lives (e.g. walking, cycling; swimming)
- Behaviour change techniques:
  - Achievable weight loss goals and targets for individuals
  -
- 1-1 and group peer support
- Multi-disciplinary input (dietitians, psychologists, physical activity instructors, etc.)
- At least 3 months in duration, with sessions that are offered at least weekly or fortnightly, which monitor weight and include a `weigh-in' at each session
- MCI that is long-enough for it to become a series of healthy behaviours

OUTCOMES

SHORT TERM HEALTH INDICATORS	MEDIUM TERM HEALTH INDICATORS (approx. 3-5yr)	IMPACT / SYSTEMS INDICATORS (tipping point) (10yrs plus)
Adults with ID: Increased knowledge/skills in how to reduce obesity Increase in physical acticvity and reduction in sedentary behaviour (increase in step count and other physical activities) Improved nutritional diet and reduction in dehydration (eating more fruit, eating less sugary and fried foods)	**Adults with ID:** Further increased knowledge/skills in how to reduce obesity Improved patterns of physical activity, reduction in sedentary (further increases in step count and other physical activities) Further improved nutritional diet and reduction in dehydration (eating more fruit, eating less sugary and fried foods)	**Adults with ID:** Increased life expectancy Reduction in chronic health conditions such as Type 2 diabetes, heart disease and cancer Reduction of early and avioable deaths Improved quality of life and life years
Family carers and staff Increased knowledge and skills of how to promote a healthy lifestyle and reduce obesity	**Family carers and staff** Further increased knowledge and skills of how to promote a healthy lifestyle and reduce obesity	**Family carers and staff** Less anxiety about the increasing obesity of people with ID. People with ID are supported to engage in healthy lifestyles in their local community
ID organisation and groups: Pre and post weight MCI evaluations and also in annual health check Increase uptakes of referrals to health specialists	**ID organisation and local groups** Further increase in annual health checks Further increase uptakes of referrals to health specialists	**ID organisation and local groups** Equal access to health care, health promotion and health screening Reduction in A&E admissions and hospital admissions Life expectancy of people with ID is compared to non-ID population Cost-efficiency savings in healthcare costs

EXTERNAL BARRIERS

- Availability of local services and supports for people with with ID, family carers and staff to access a locally avaliable physical activity and healthy eating groups in their local community
- Competing demands on time and availability of the people with ID, family carers and staff to attend the